INFANT AND YOUNG CHILD WELFARE

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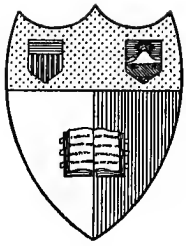

Infant and Young Child Welfare

BY

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PREFACE

CHILD welfare is no longer a subject that interests only doctors and social workers. It is a living issue to-day. On all sides our attention is called to the needs of the baby and the mother. Recent legislation has forced the subject on local authorities. There is a deep and widespread determination among all classes of society that in future the children shall be better cared for than they have been in the past.

In one sense the problem is simple; it all depends on good mothering. In another sense it is complex because, in trying to remove the hindrances to good motherhood, we are up against every social problem. One thing is certain. No one will contest the importance of the problem, or the fact that upon our solution of it depends the future of the British Commonwealth.

The aim of this book is to give a bird's-eye view of the whole question of child welfare, and it is hoped that it may prove to be of interest to the general reader as well as to members of local authorities, midwives, maternity, district, and other nurses, health visitors, members of Volun-

tary Aid Detachments, and all those who realise the supreme importance to the country of healthy children.

To Sir Hall Caine and Messrs. Hodder and Stoughton I tender thanks for permission to quote from "The Queen's Gift Book" the stanzas which appear on p. 1.

H. S.

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If He ordered that the mother for the children of her womb
Should dare her death by travail and fight till crack of doom,
He ordained that by that impulse, still the purest and the best,
She should gather all that suffer in her pity to her breast.

Nurturing, nursing, guarding, giving strength with heart and hand,
Paying toll in pangs to Nature which no man may understand,
Dauntless from the God who made her without fear to draw her breath,
Saviour of the weak and helpless, first at birth and last at death.

Since, the Lord creating Woman, she became a living soul,
Hers has been the old Earth's burthen, age on age, from pole to pole,
Hers the conflict, hers the conquest, hers the flag of life unfurl'd,
Hers the sorrow, hers the suffering, hers the love that rules the world.

HALL CAINE, in "The Queen's Gift Book."

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INTRODUCTION

So-called Darwinism has been applied to the problem of infant mortality. One frequently meets people who think that a high mortality and slum conditions provide for the removal of the " surplus " population and the " survival of the fittest." I came across a good example of this a few years ago in a book written by an African missionary. The author, in drawing attention to the terribly high rate of infant mortality among the primitive tribes, uses these words : " The life of an African child is a constant witness to the practical truth of the Darwinian principle of the survival of the fittest," and then goes on to say, " Perhaps if some of the safeguards so elaborately gathered round English children were removed we should see some compensation for a higher death-rate in an improved stamina and physique." The author in question dedicates his book " To my mother, to whose guidance I owe my inspiration, and to whose watchful care I owe my physical equipment for the work of the mission-field." On his own show-

ing, if his mother had indulged in a little judicious neglect he would have been either conveniently dead or " fitter " than ever.

Can the doctrine of the survival of the fittest be applied to our method or want of method as a community in the rearing of children ? Darwin pointed out that every organic being naturally increases at so high a rate that if there were no destruction of life the earth would soon be covered by the progeny of a single pair, and that as a result there is a constant struggle for existence between various races of animals. It thus came about that those animals of a particular kind which possessed slight peculiarities that enabled them to cope with their environment tended to survive and propagate their species, and to hand down to their descendants by heredity the advantageous peculiarities. As these peculiarities became more and more marked, generation by generation, new types of animals became evolved. This, briefly, was the principle of the evolution of new types by natural selection. The types which survived were not necessarily the highest ; they were simply those which were fittest to cope with the dangers of their environment at the time being.

If Darwin's principle could be applied to life under slum conditions, all that it would mean would be that the survivors were the fittest to live in slums !

It may be that in a slum the babies fittest to combat slum conditions survive, but we have to bear in mind that very many of the fit babies

become maimed in the process. If the sole object of life were to endure slum conditions, the doctrine might have some weight, but does it follow that the baby best able to stand slum conditions is going to be the best man or woman to hand on the torch of civilisation ?

Akin to the doctrine of the usefulness of slums in providing for the survival of the fittest is the theory that it is a mistake to attempt to control the infection of tuberculosis, and that by so doing we are tending to rear a race of weaklings. This theory occasionally receives support from members of the medical profession, who apparently regard the tubercle bacillus as a useful means of keeping up the tone of the disease-fighting cells of our bodies. Athletes, however, as well as scholars die from tuberculosis, and it must be repeated that there is no evidence that the persons who put up the best fight against the tubercle bacillus are the " fittest " for carrying on the work of the world and the progress of humanity. We are born tuberculisable, not tuberculous, and if a man succumbs to tuberculosis it is because he has been exposed to big doses of infection or because his resistance to tuberculosis was slight. It is quite as unreasonable to say that a strong man who dies from tuberculosis must have been a weakling as it is to say that the men who die from typhoid fever or pneumonia were weaklings because their powers of resistance to these diseases were insufficient. The owner of a pedigree bull does not consider the animal a weakling because

he has to take steps to protect him from the infection of tuberculosis.

It must be a good thing for each individual to lead the kind of life that strengthens resistance against tuberculosis, and surely it must be a bad thing to expose oneself unnecessarily to the tuberculous infection.

Most readers of "The Science of Power" will probably agree with Benjamin Kidd that the doctrine of the survival of the fittest has no message for students of social evolution.

Darwin recorded what happened when Nature was left to herself, and his theory no doubt provided a satisfactory explanation of the evolution of the animal world and the gradually acquired dominance of primitive man over the brute creation.

Kidd shows how the survival of the fittest has tended to the gradual perfecting in the individual of every quality contributing to his own efficiency in pursuit of self-interest. He further shows that the Darwinian theory has been used to justify the German doctrine that might is right, the application of force to the solution of industrial problems, the ruthless race for wealth, and proposals for the scientific breeding of humanity. The last-named is a revival of the views advanced in Plato's "Republic." Family life is ignored. Men and women are selected for breeding purposes, and great care is to be taken of the offspring of these selected types. "But the children of the more depraved, and such others as are in any

way imperfect, they will hide in some secret and obscure place, as is proper," or "expose it as a creature for which no provision is made." Some sanitarians seem to flirt with this idea of breeding from selected types. Even if it were feasible, what is to be done with the offspring of the unselected types? Are they to be got rid of, as in Plato's Republic? Again, when we come to provide thus artificially for the survival of the fittest, who are the fit? The brainy persons with poor bodies, or the brawny persons with poor brains? The former would include Calvin, Richelieu, William of Orange, Chatham, Robert Louis Stevenson, Chopin, Darwin, and a host of other makers of history. Weakly babies often grow up to be strong men and women, and one wonders how many useful citizens the Spartan Council of Elders ordered to be thrown down the cavern of Mount Taygetus. Nelson was a weakly child, who might have been condemned at birth by a Spartan Council of Elders, and would certainly have been killed by slum conditions. I do not think, however, that many people can seriously believe in slums as improvers of the race. Fewer still will regard schemes for the scientific breeding of humanity as practical politics. Men and women are not going to have their mating regulated by a eugenic priesthood, and the most we can do is to endeavour to prevent the marriages of such as syphilitics, epileptics, alcoholics, mental defectives, and persons suffering from an infectious stage of tuberculosis. The aim of scientific breeding would be to

produce a few supermen, the trend of social evolution is to give every child a chance and to raise the average. We might use the simile of a competition between teams of harriers. We want a good average, and not a team composed of a few brilliant runners and a " hopeless tail."

It has for long been the ethical code of Medicine to use all its powers to prolong human life, however maimed, and Preventive Medicine must square its efforts with that code.

Kidd's writings have helped us to realise the deadening effect of an exaggerated belief in the doctrine of heredity, and will inspire us to take up with renewed vigour the question of improving the environment.

One of the most interesting chapters in " The Science of Power " is that on " Social Heredity," in which it is shown that many of the characteristics of animals which have hitherto been regarded as hereditary habits or instincts are not really due to inborn heredity at all, but are acquired after birth as part of the social inheritance which the adults of the species impose by example and training on the young of each generation.

The War has brought us down to the realities of life, and we realise as we never did before that the health and education of the children are the chief things that matter. Failure to care for the young life is not only folly in a nation but an offence against humanity. We want healthy babies born of healthy mothers in healthy homes. After they are born, the parents must have sufficient

means to maintain them, and the aid when necessary of an efficient medical service.

We look back rather vaguely to a merry England some time in the past, and no doubt we have suffered from urbanisation and the introduction of factory and modern industrial conditions, but still a study of the old church registers does not leave one altogether *laudator temporis acti* as regards child life.

If every child has a chance, and every family a real home, we shall have built up a merrier England than ever existed before.

CHAPTER I

Healthy Parents

THE infant science of Eugenics has not much bearing as yet on the problem of child welfare, and schemes for the " scientific breeding " of humanity are not within the region of practical politics. We cannot select the sires and dams, as in breeding racehorses. It is said, however, that every infant has a right to be " well born," but up to the present that only means that an infant has a moral right to be born in a reasonable environment and of parents free from certain diseases or defects which may be communicated to it before or immediately after birth.

Five of these diseases or defects about which there is general agreement are mental deficiency, epilepsy, alcoholism, venereal disease, and tuberculosis.

Let us consider these subjects in turn.

Mental deficiency.—The law ought not to allow mental defectives to marry or to have children. The Mental Deficiency Act of 1913 does something in this matter, but does not go far enough. The Act does not directly prohibit the marriage of " defectives," but it has some effect in the promotion of this desirable object indirectly by providing for the permanent care of the

" defectives " in institutions under certain circumstances. The cases which, in the opinion of the Education Authority, require to be sent to an institution or placed under supervision are to be reported to the Local Authority, with whom it rests to take the necessary action. Two recent cases which have been brought to my notice will illustrate what may happen. A clergyman reported that he had been asked to marry two persons whom he knew to be mentally defective. Inquiries were at once set on foot. The girl was found not only to be mentally defective, but also to be suffering from venereal disease. The marriage was prevented by her being sent to an institution. In the second case, a clergyman refused to marry two " defectives," and they were married by licence before a registrar, the girl being pregnant at the time. The girl in this case was seventeen years old, and the man, who had been rejected from the Army on account of his mental deficiency, twenty-three years of age. Special provision is made in the Act for sending to an institution a defective who is in receipt of poor relief at the time of giving birth to an illegitimate child or when pregnant with such a child.

For dealing with this question efficiently the law requires to be strengthened, but in addition to this far more institutions for the accommodation of mental defectives are needed. The provision of these very necessary institutions is one of the many matters which have been postponed by the War.

The prevention of the marriage of mental defectives would deal with the most unpleasant phase of this problem, but it would not deal with the whole problem. Our knowledge on this subject is insufficient, and in the majority of cases we are unable to trace mental deficiency in the children to any known parental or hereditary cause.

Epileptics.—Epilepsy ought to be regarded as an absolute bar to marriage, both in the interests of the children that may be born affected with the disease, and in the interests of the healthy partner of the union. At the present time the risks are very insufficiently understood, and it is quite common for persons who have suffered from epileptic fits to marry.

Alcoholism.—The abuse of alcohol is the principal cause of child neglect and the source of widespread misery in families, but in addition to this the children of excessive drinkers are liable to be weakly at birth or to develop weakness of mind or body in later life. Unfortunately, the tendency frequently does not show itself till after marriage, so that preventive measures are not easy. Parents of marriageable children can no doubt do something by warning and advice. Everything should be done to encourage temperance. Possibly the Temperance cause has been injured in the past by the intemperate language of some of its advocates. A man who likes a glass of beer with his dinner is not exactly a criminal, and if our people only drank at meal times we should be a sober nation. It is the abuse of alcohol, not

its use, that does the harm, but it must be admitted that many people have the most erroneous ideas as to what is meant by moderation. The approximate safe limit has been laid down as one ounce of alcohol per day for a man doing a reasonable day's work, and this amount would be contained in less than a pint of beer. In any case, for a healthy person alcohol is a luxury and not a necessity, so that it often comes to be a question as to whether "father's beer" makes the rest of the family go short of necessaries.

The common saying that you cannot make people sober by Act of Parliament has been to a large extent disproved. Lord D'Abernon, the Chairman of the Liquor Control Board, has shown that the curtailment of facilities for drinking has had a most marked effect. Not only has there been a huge reduction in convictions for drunkenness, attempted suicides, and cases of delirium tremens, but the statistics derived from certificates of death show a remarkable decline in the deaths caused by alcoholism. Thus in England and Wales in 1913 there were 1,831 deaths from alcoholism, in 1917 only 580; in 1913 there were 1,226 infants suffocated by overlying, in 1917 only 704; and in 1913 there were 3,880 deaths certified from cirrhosis of the liver, in 1917 only 2,283. An important point about these statistics is that they come from an independent source. They are compiled by the Registrar-General from information supplied by all the doctors and coroners in the country, so that the gibe that statistics can be

manipulated to prove anything does not apply in this case. It is to be hoped, for the sake of the race, that we shall never return to pre-War facilities for drinking. Education, however, must always be the most powerful factor in promoting temperance. The education of a great part of the children of the country has hitherto ended at 13, the age when the education of the children of the middle classes begins in earnest. When education has been levelled up by the raising of the school age to 15 and the continuation of half-time education to 18, the rising generation will want more intellectual recreation than at present, and the amusement of standing at a bar drinking will become less popular. One would like to see the "stand-up" drinking bars replaced as far as possible by places where, to quote Lord D'Abernon, "facilities for obtaining attractive, well-cooked food and refreshment in pleasant surroundings" are provided.

Venereal diseases.—If the War has had the effect of reducing the damage done to child welfare and family life by the abuse of alcohol, the opposite must be said as to the ravages of the venereal diseases. The danger from this source is very great, and needs to be appreciated by every member of the community. The National Council for Combating Venereal Diseases is doing a great work in making the danger known. The two diseases which we have to fight are gonorrhœa and syphilis, and both have disastrous effects on child life.

Gonorrhœa, if not treated promptly and efficiently, is liable to become chronic and cause inflammation of the bladder and kidney, stricture of the urethra, and inflammation of the generative organs, leading to sterility in the male. If the man marries without proper treatment and before he is cured, he may infect his wife years after he contracted the disease himself, with the most terrible results. The disease in the woman may lead to all sorts of complications. A large proportion of the operations which have to be performed in women's hospitals are the result of neglected gonorrhœa, and it is one of the commonest causes of sterility in women. Not only does gonorrhœa prevent the birth of children: it is also responsible for one of the commonest causes of blindness. If the mother suffers from a gonorrhœal discharge at the time of childbirth the baby's eyes may become infected, and severe inflammation, known as gonorrhœal ophthalmia or ophthalmia of the newly born, may be set up. It is estimated that more than one-third of the inmates of institutions for the blind are admitted there from this cause.

Syphilis is still more appalling in its effects than gonorrhœa if not properly treated, but, fortunately, great advances in the treatment of this disease have been made of recent years. Prompt treatment is the great thing. A painless sore or ulcer at the point of infection is the first sign of the disease, and then is the time for getting treatment. Time is often lost by the patient consulting

a quack. There is no excuse for this now, as clinics have been established all over the country where the best modern treatment for venereal diseases is given without charge and under conditions of secrecy. Two cases of treatment by quacks have been recently brought to my notice In one case the man had been under treatment for months and was in a shocking condition when induced by a friend to come to the clinic, and as the result of the delay his cure has been rendered problematical or at best delayed for years. In the other case the patient had been under treatment by a quack for eight months, and had consumed eighty bottles of medicine for the purpose of curing a venereal disease which had no existence !

Treatment of these diseases by quacks is now forbidden by law, but it still goes on, and is difficult to stop, for the victims, not unnaturally, are unwilling to face the publicity of giving evidence in a prosecution.

If the disease is not properly treated, the first sore is followed by the second stage, with ulcers in the mouth and throat and elsewhere, skin eruptions, loss of hair, etc. This is followed by the third stage, which may attack any organ of the body, eating away the palate or bones and causing large ulcers of the skin. The blood-vessels may be affected, causing aneurysm and early apoplexy. The nervous system may be affected, leading to the diseases known as locomotor ataxy and general paralysis of the insane. If a man

marries before he is cured he may give the disease, with possibly these sequelæ, to his wife.

But that is not all. The most terrible thing about the disease, from the point of view of this book, is the effect on the children if the man or woman who has had syphilis marries before being thoroughly cured.

The usual history is for the wife to have one miscarriage after another and then one diseased child after another. Many thousands of children die before they are born owing to parental syphilis, many thousands more die in the first year of life, or survive to become blind, deaf, or paralysed, or to grow up mentally defective. In the interests of childhood and family life it behoves us to do all we can to stamp out venereal diseases. What can we do ? On two points all are agreed. Firstly, that every person who becomes infected with syphilis or gonorrhœa should at once get the special treatment required and continue the treatment as long as his doctor says it is necessary. Secondly, that the man who marries before the medical expert who has treated him has pronounced that he is no longer infectious and may safely marry is a criminal of the worst kind. This is not a case for taking risks and gambling with the health of the prospective wife or the children that may be.

As to other points, there is not the same general agreement. A great controversy rages as to whether the prevention of the disease should be tackled simply by a moral and educational campaign, or whether it is justifiable to reduce the risk of

infection by the distribution to those who insist upon being immoral of prophylactic outfits. Experience in the Army has shown that there the use of prophylactic outfits has greatly reduced the prevalence of venereal diseases. Those who oppose the issue of outfits do so on the grounds that it is a form of State regulation of vice, that it is wrong to try to make immorality safe, and that the fear of contracting venereal diseases is a valuable stimulus to morality. There would be more force in the argument that the punishment fits the crime if the punishment were limited to the criminal, and if it were not for the fact that a very large percentage of the sufferers from these diseases are women and children who have acquired them innocently from the wrongdoers. Some think there is not much to be said in favour of a morality which is simply dependent on the fear of consequences; but on the other hand the fear of punishment is a recognised part of our civil code. Some who oppose the issue of outfits are in favour of the establishment of preventive-treatment centres, where, by means of antiseptic ablutions, the risk of contracting venereal disease may be diminished for those who have exposed themselves to the risk of infection.

However much opinions may differ with regard to preventive methods, all are agreed that moral and educational propaganda work is of the highest importance. If we could abolish prostitution and promiscuous sexual intercourse, venereal diseases would rapidly disappear. In the first place, the

medical profession must state with no uncertain voice that continence is consistent with perfect health, and that no one who abstains from sexual intercourse will suffer in health in the slightest degree by so doing. We also need a higher ideal of parenthood and family life. Every Jewish father gives counsel to his son at puberty and before marriage on sexual matters. The Jewish mother does the same by her daughter. With us, on the other hand, a boy is often dependent on older youths for information on sexual matters, and the sound rule, *maxima debetur puero reverentia*, is not always observed by the man of the world. The first step in immorality may be taken by a youth from the desire to be thought manly, or from curiosity, or from a lurking fear that he may be unable to perform the sexual function, or as the result of bad advice from an elder that the desire for sexual intercourse is natural and that it is better for his health to indulge the desire. If the boy got information from his father at the right time he would be forewarned and forearmed. The Gentile parent should emulate the Jewish parent in this matter.

We are not, however, going to abolish immorality and venereal diseases by cold reason. Benjamin Kidd, in "The Science of Power," points out a more excellent way. We must act on the emotions of the ideal in the young. Kidd asserts that the average man is not prevented from becoming a swindler or a thief by the fact that honesty is the best policy, but by the fact that life would not

be worth living for him if he lost his self-esteem according to the code in which he had been brought up; and that nations will not give up war "because it doesn't pay," but only when the barbarism of war is felt to be a disgrace by the conscience of humanity. Similarly, we shall not abolish prostitution and immorality because they don't pay, but only when the ideals of motherhood and family life have been raised. These ideals have undoubtedly been lowered during the industrial revolution and urbanisation of the nineteenth century. Perhaps the twentieth century will rediscover the mother. The Jews have always scored by the fact that a reverence for motherhood, family life, and education is a definite part of their religion. One feels also that the Protestant religions may have lost much incidentally by discarding the Madonna. The low infant mortality in the poor country districts of Ireland and the better mothering of children in the slums of our large cities by Italians, Spaniards, and Poles than by the native women are illustrations. If to sensible instruction of the young in sexual matters there could be added a higher ideal of the sanctity of motherhood, would not the tragedy of the condemnation of a potential mother to the degraded life of a prostitute be brought into more startling relief?

Tuberculosis.—Tuberculosis is in a different position from syphilis because it may be said with truth that a baby born infected with tuberculosis is so rare as to be a freak. In the case even of cows, which go on bearing calves while markedly

tuberculous, the birth of a calf actually infected is a very rare event, and is only possible when the womb is tuberculous or the disease is so advanced that tubercle bacilli are circulating in the blood. Under these latter circumstances the human mother would not give birth to a living child. Although infection before birth is almost impossible, infection after birth is, on the other hand, very easy and very common if one of the parents has tuberculosis of the lungs and expectorates living tubercle bacilli. What we have to guard against, therefore, is infection after birth. We cannot lay down any rule as regards the mysterious predisposition to tuberculosis. There is no means of testing the predisposition except by seeing how easily the individual catches the disease. This is being wise after the event. The predisposition may run in families, and may be acquired from environment. The liability to or immunity from tuberculosis is, therefore, for most of us an unknown quantity, unless we can say that we have been exposed to massive doses of infection without effect.

Post-mortem examinations show that most people experience slight infections with tubercle and overcome them, as a rule, without the presence of the disease being suspected during life. When marriage is in question we can only consider recognisable attacks of the disease which have reached a certain stage. For instance, an occasional attack of pleurisy in an otherwise reasonably robust person, or a tubercular hip-joint or knee cured in childhood, could not be considered

bars to matrimony. On the other hand, very few persons who reach the stage of open tuberculosis of the lung with an expectoration containing tubercle bacilli ever lose the tubercle bacilli from their sputum, and medical opinion would be agreed that such persons ought not to marry. As with venereal diseases, so with tuberculosis, there is no excuse for ignorance. There are free tuberculosis dispensaries all over the country, and any person affected with this disease can obtain a reliable expert opinion as to whether he or she is justified in marrying.

In the large majority of cases the danger to the children arises from one or the other of the parents becoming tuberculous after marriage. In such cases the danger can be greatly lessened if the tuberculous parent is able to carry out the instructions which he will receive from the Tuberculosis Dispensary or during his residence at a sanatorium as to occupying a separate bedroom, adopting an open-air regime, and being careful about the destruction of his infectious expectoration.

We have to recognise, however, that we have only touched the fringe of this vast problem as yet. Sanatoria have failed because we have not adequately supported the family of the consumptive, and because we have only just begun to realise that the labour of the consumptive cannot compete with healthy labour and must always be subsidised. The recognition of these two facts has led to the establishment of Papworth Colony, in Cambridgeshire The problem is a national

one : trades which pay a heavy toll to tuberculosis are carried on for the country as a whole, and not only for the benefit of the district where they are established. The State should therefore establish colonies similar to that at Papworth, with model factories and workshops, to which consumptives and their families can be sent by local authorities, and in which, owing to the attractive conditions, they will be glad to stay as long as the interests of their health require. The subsidisation of the labour of consumptives must be regarded as the payment made by the community to guard itself from infection, and the adequate maintenance of the children of consumptives ought soon to show its effect in the lessened prevalence of the disease. At present the children of a consumptive breadwinner are generally exposed to a double risk : they have the infection in the home, and they are not sufficiently fed to enable them to resist it.

Certificate of fitness for marriage.—As regards the general question, I believe it is usual in France for the parents of the prospective bride and bridegroom to make careful inquiries with regard to the health record of the parties to the proposed alliance. Medical certificates before marriage have been advocated, but a single examination by a strange doctor might prove illusory. A syphilitic, for example, might be examined at a time when he was free from symptoms and passed as safe when he was not safe ; or, again, the examinee might fail to mention that he had suffered from

epileptic fits. A reliable certificate could only be given by an examiner who knew the health record and from whom nothing was concealed. The value of the certificate would therefore largely depend on the truthfulness of the examinee, just as in the case of an examination for life insurance. A nice point would arise as to how far the man would be in honour bound to mention the fact that he had suffered from syphilis, even if the doctor who treated him was satisfied that he could safely marry.

Of course, in order to secure healthy parents we really ought to begin with *their* parents, but we have to take the prospective parents of the present day as we find them, and do our best to limit the effect of influences such as have been mentioned. In the course of time, as social conditions and the Public Health Service in the broadest sense improve, new generations of parents will grow up better fitted than those of the present day to hand on the torch of civilisation.

CHAPTER II

Healthy Homes

THE home is not merely the roof or shelter under which the members of a family eat or sleep. It should be a happy centre of life where every member of the family can read, work, play, or rest in comfort, and it has so important a bearing upon the welfare of the infant and the young child that, although it forms the subject of one of the books in this series,* I must devote to it a short chapter.

Owing to the stoppage of building operations during the War there is a great scarcity of houses and much overcrowding. Many of the existing houses are unsatisfactory, and thousands of houses of a higher standard are needed. The **minimum requirements of the healthy home** may be summarised as follows :—

1. Every room in the house should be well lighted and properly ventilated.
2. There should be sufficient sleeping accommodation for each member of the family without overcrowding and with due regard to decency.

* "Housing and Public Health," by John Robertson, C.M.G., O.B.E., M.D. 1919.

3. The living-room, which may also be the kitchen, must be sufficiently large to allow children and adults to sit and read in comfort.
4. There should be a bathroom with hot and cold water, and a sink with hot and cold water inside the house; also facilities for washing and drying clothes.
5. It is also necessary for the healthy home to have a cool place for food storage, with direct ventilation from the outside air.
6. There should be a water-closet for the use of each family and a movable receptacle for house refuse.

In addition to this, every house should have at its door a satisfactory open space in which children can play without having to cross main roads.

To any ordinary person glancing at these requirements they would seem the absolute minimum, though there might possibly be a difference of opinion as to whether a bath is an amenity or a necessity. Yet, if we consider these requirements in detail, we shall find that in some of our big industrial centres, as well as in many rural districts of England, there are parents trying to bring up healthy families in houses which are very far from fulfilling these demands.

Women architects.—Architects and builders are, of course, in one sense of the word the " build-

ing experts" when it is a question of site, elevation, and actual planning of a house, but there is no doubt that the real "housing expert" is the woman who has to run the house. She is the person who really knows what is wanted to make a house convenient and fit to live in. So far, she has not been sufficiently considered by the builders. Why should we not have women architects? The two objections one used to hear before the War were that women were not good at going up ladders, and could not use strong enough language to the builder's foreman. The nimbleness of the women window-cleaners has disproved the former statement, and perhaps the latter was a libel.

Cleaning, cooking, scrubbing, and keeping home and children clean and respectable are very pleasant jobs in their way, but there are limits to a woman's strength, and there are only twenty-four hours in the day. It is not sufficiently realised what a very hard life the woman has who brings up a large family in a big town on small means, and there is no need for housework to be made unnecessary drudgery.

The hot-water supply.—It is, for instance, practically impossible to keep a house and family clean and healthy, especially in a big city, without a proper hot-water supply. This point was very strongly insisted upon in paragraph 13 of the first interim report by the Women's Housing Sub-Committee of the Ministry of Reconstruction Advisory Council. I quote it in its entirety:

"It cannot be too strongly emphasised that a regular and efficient water supply is a *sine qua non* from the point of view both of personal cleanliness and of labour saving. The extra time, trouble, and expense involved when water must be heated in kettles and carried to the bath, washtub, or sink is a serious addition to the housewife's burden. A great part of the everyday work of the house, as well as the laundry work, is doubled by the lack of a proper supply of hot water. The extra strain on the woman's strength, coupled with the waste of time, leaves her without either the opportunity or energy to attend to other household tasks or to secure any form of recreation for herself."

Many people do not realise that there are still tens of thousands of homes in this country without a hot-water supply, and many groups of houses where the only water supply is a standpipe in the yard. The additional work for the mother involved in the case of houses where a convenient water supply does not exist and where there is a big family to cater for can only be realised by those who understand what it means for one woman to undertake the entire care of a house and family.

Surely, when we are considering the well-being and health of the children, it is important to see that the mother should have some little leisure in which to read and keep abreast of the times. If she has not, she will soon find that the children, as they grow up, will cease to consult her or consider her opinion, and "mother" gradually becomes

for them the household drudge, the provider of the food, and in some cases (and who can wonder at it ?) the ready fault-finder and scolder of the young people who come heedlessly rushing into the house from school or workshop, so engrossed with their friends or arrangements for amusements that they scarcely notice the weary, hard-worked woman who is the "home-maker" for them, except to grumble at her if the meals are late or the house untidy.

The larder.—One thing very often neglected by the builders of small houses is the provision of any sort of decent larder. There are countless homes in this country where the only place for the storage of food is either the cellar stairhead—very often quite a warm place—or a small stone table in part of a small, dark coal cellar, which is unprotected from dust and really not possible to use; and the housewife with the very best intentions cannot store such things as milk and meat in hot weather without the milk going sour or the meat becoming maggoty.

Indeed, when one considers the difficulties and inconveniences which have to be faced by the ordinary town mother, one is not surprised at the high infantile death-rate, but is rather amazed at what goodwill has accomplished in the face of apparently insurmountable difficulties.

Ventilation.—It is important for the healthy home that it should have as much sunlight and fresh air as possible, and that the windows should open freely. If the windows are double sashed,

the two portions should be equal, so that half the window space is openable at one time, and if the casement window is adopted it is not sufficient that only one-third of the window space is made openable, as is frequently the case. No house can be considered healthy which cannot be flushed with fresh air in a few minutes. One would like to see all curtains and lace frills around windows abolished. They lessen the amount of fresh air and sunlight available, and the air, when it does penetrate fold after fold of stuffy lace or material, is dusty and musty, and has lost much of its original freshness. Of course, in the case of some of the windows some screening is necessary for privacy, but that is no justification for blocking up all the windows for the sake of uniformity. In some towns, in addition to the ordinary supply of blinds and curtains, it is fashionable to have an abomination known as a sham blind which permanently cuts off a third or a quarter of our not too plentiful sunlight. An undressed window seems to be considered indecent! Venetian blinds may be all right for the clear, clean air of Venice, but they are dust and dirt traps in an industrial town. Here, again, much of the lighting effect of the window is lost because the housewife lets the blind half or two-thirds way down the upper sash, according to the custom of the town.

Aspect of the kitchen.—The kitchen or living-room is the place where the mother and younger ones of a family spend most of their time. It seems a pity that this room is not always given

the best aspect and position in the house. The parlour is often little used except on state occasions and perhaps on Sundays, but nevertheless is generally considered a necessity by the poorest family, and may be given the sunny aspect. We are too much tied up by conventions. If a street runs east and west and the northern houses have living-rooms with a southern aspect, for the sake of symmetry the builder gives the living-rooms of the southern houses a northern aspect. Why shouldn't he reverse the plan for the southern houses, so as to give all the living-rooms a southern aspect? Again, why should a house have a back? Why not two fronts? A back was necessary when you had an offensive privy midden as a convenience, but a dustbin can be hidden anywhere without spoiling either of the fronts. It has been suggested that living-room and parlour should form one large room which could be divided at need by folding doors, so that, as a rule, the warmth and comfort of the kitchen can penetrate the parlour, and the kitchen in return be lighted and brightened by the parlour windows. Whether this suggestion be approved or not, the kitchen-living-room in the typically healthy home should be the largest, best-lighted, and pleasantest room in the house, where everyone in the family can, after the day's work is done, sit, read, rest, or play in warmth and comfort.

Not too many doors.—Warmth and comfort can never be obtained in a room which has four or five doors in it or into which the house-door

opens direct. It is quite usual in Sheffield houses for the outside door to open direct into the living-room. A small living-room often has four doors opening into it—a door leading to the street, a door leading upstairs, a door leading to the coal cellar, and a door leading to the scullery, which may in turn have an outside door leading into the yard. In such a room there is not much comfort or pleasure for anyone sitting in front of the fire, and there is practically no wall space for a dresser or other necessary article of kitchen furniture. The writer has had his meals for the last two years in a kitchen with a door opening direct into the yard and three other doors leading to the scullery, cellar and front door respectively, and he now thoroughly understands the discomfort caused by a superfluity of doors in a room, and also the need for the outside door to open into a lobby or passage or, at any rate, into the scullery, and not directly into the kitchen.

Another debatable point is as to whether there is any necessity for any small house to have two house-doors. The front house-door is rarely used, and only increases draught, dust, and discomfort. I once stayed at the seaside in one of a row of very pleasant two-storeyed houses, each of which had only one door. On one side of the house were windows only, looking on to the street; on the other side was the door, leading through a little garden to another street.

The sink.—Opinions vary as to whether there should be a sink in the kitchen-living-room. It

is certainly much more comfortable and less labour for the housewife to wash up after meals in a warm kitchen than to have to carry the things through to a cold scullery and bring them back to the kitchen dresser. If the sink is in the living-room it will always be kept clean. *Crede experto.*

Carpets.—Floors completely covered with carpets are dirty, dusty, and unhealthy. Linoleum is much better, and small rugs, which can easily be taken out and beaten, can be added in the case of bedrooms if thought necessary. Stair-carpets are a great source of dust and labour. The air in the staircase will be much purer and much labour will be saved if the treads are covered with linoleum with rubber nosing.

Bath and bathroom.—One often hears discussions as to whether a bath should be provided in the ordinary cottage home. Many stories are told about the bath being used for storing coal, etc., but it is not generally understood that many of the modern workmen's houses with baths have no bathroom. There is no privacy for the would-be bather. The bath is more often than not in the scullery—a place which is in constant use in a family of any size, where, for example, all the washing-up is done after meals—and in many houses the back door opens direct into the scullery where the bath is fixed. Again, many of the baths which have been installed have no hot-water supply; others have even no waste-pipe and require not only to be filled from a kettle, but also to be emptied by means of a ladle or a siphon arrangement.

Should we often take a bath if we had to ladle out the water afterwards? And yet a bath and a bathroom may be considered almost a necessity of life. If anyone doubts it, let him do some really dirty work, such as putting in and stacking a load or two of coal in the coalhouse, and then try to get clean in the water contained in the ordinary hand-basin. Then let him consider what must be the life of the wife of a coalminer or chimney-sweep who has no bathroom and no hot-water supply laid on in her house. It is very hard to keep clean, and especially hard to keep children clean, in a big smoky city, but it is ten times harder to do this without a bath and proper washing accommodation.

It is a good plan to have the hot-water cylinder placed in a room other than the kitchen, so that it may heat an otherwise unwarmed part of the house instead of overheating the kitchen. A good place for it is the bathroom.

Facilities for drying.—In our climate great discomfort is caused if there is no arrangement for drying clothes, especially in the case of a large family. A rack, worked by pulleys, should be fixed to the kitchen ceiling for this purpose.

Self-contained cottages or flats.—With regard to the preference most people have for self-contained cottages rather than the flat system, I do not see how a flat, unless it be on the ground floor or have a yard on its own level, can be a healthy home for babies and little children. The mother cannot be always helping very small

children up and down stairs. I have always thought the want of fresh air and sunlight from this cause had something to do with the prevalence of rickets in Glasgow. The epoch-making discovery that a baby can be put outside in its pram instead of being wheeled about is of no use to the mother unless she can overlook the baby in the yard while she is at work in the living-room.

It is perhaps Utopian to wish that every home might have a garden of its own, however small. There is no doubt that such an ideal, if realised, would go far to make our homes more healthy.

One might almost say that a garden is more necessary than a parlour, serving, as it does, in turn as a nursery, drying-room, workshop, playground, and open-air dining-room.

If the minimum requirements of the healthy home summarised at the beginning of this chapter are fulfilled and the Sanitary Authority removes the refuse regularly and scavenges the streets efficiently, it rests with the housewife to see that the house becomes a healthy home by keeping it clean and by opening the windows to let in fresh air. It must never be forgotten that it is the woman who makes the home. Given an untidy dirty housewife, the most modern and best-fitted house in the world would be nothing but an unhealthy home, while on the other hand some badly constructed, poorly ventilated, inconvenient back-to-back houses have been made happy, healthy homes by the devoted work of women.

Landlord and tenant.—There is another point

of importance. Bad tenants make bad landlords, and bad landlords make bad tenants. The sacrifices of the War will have been in vain if we have not got a step farther towards realising the essential brotherhood of man. We want a better co-operation between employer and employed, but for the sake of getting better homes we undoubtedly want a better feeling between landlord and tenant. Miss Octavia Hill has shown what can be done by a more friendly system of rent collection by women who take an interest in the welfare of the tenants and make it their business to help them when a difficulty arises, and at the same time see that necessary repairs have prompt attention. A visit to the Walworth estate of the Ecclesiastical Commissioners will convince anyone of the value of this system. It may be necessary, also, in the case of incorrigible tenants, to adopt the suggestion of Mr. John Mann, junior, secretary of the Glasgow Workmen's Dwellings Company (who is a warm advocate of Miss Hill's system), and leave them to be housed by the Local Authority in the simplest accommodation possible, with the aim of getting them drilled into better ways by strict supervision.

It is not possible to lay down rules for the housing of all families, but it may be asserted without fear of contradiction that the breadwinner should be ready to spend as much as he can possibly afford of his earnings (we know that this is not the case at present) on his house rent, and that a home is healthier and easier to manage, and to keep respect-

able and clean, the farther it is from great works and from the smoke and grime of the centres of industrial life; and, further, that every home worthy of the name should contain the maximum of labour-saving appliances that can be devised for the help of the housewife, so that she may have time to be a real home-maker and friend to her own family.

We have many reasons to be dissatisfied with the present housing conditions. The final report of the Women's Housing Sub-Committee of the Ministry of Reconstruction Advisory Council should be carefully studied by all architects and members of Housing Committees.

CHAPTER III

The Mother

FOR the solution of this problem of child welfare we must look to the mother. We need to educate and train the mothers in housecraft, and to put at their disposal all the knowledge we possess about infants and children. We need to give them all facilities for doing their work, but, above all, we need the raw material, women inspired by the altruistic, self-sacrificing ideals of motherhood, shining examples of which are to be found in every modern slum among women of all races and all creeds.

Ideals of motherhood.—Everyone who goes deeply into this question comes to the same conclusion, and decides that " the mother's the thing." Let me quote from Mr. John Burns, when, as President of the Local Government Board, he delivered his memorable address to the National Conference on Infantile Mortality in 1906:

" First, concentrate on the mother. What the mother is, the children are. The stream is no purer than its source. Let us glorify, dignify, and purify motherhood by every means in our power. Let us see to the nursing child in every way; nourish the mother, you feed the child. In every aspect of this subject let us have good mothering; that is at the bottom of happy, healthy children. . . . Milk depots

are good, but not good enough if they supersede or discourage breast-feeding. Crèches may be all very well here and there. Personally, I am against them, because I believe that crèches stimulate the growth and increase of married women's labour."

Sir George Newman, in his book on "Infant Mortality," published in 1906, after discussing the causes of infant mortality, proceeds as follows:

"This book will have been written in vain if it does not lay the emphasis of this problem upon the vital importance to the nation of its motherhood. Wherever we turn, and to whatever issue, in this question of infant mortality, we are faced with one all-pervading primary need—the need of a high standard of physical motherhood. Infant mortality in the early weeks of life is evidently due in large measure to the physical conditions of the mother, leading to prematurity and debility of the infant; and in the later months of the first year infant mortality appears to be due to unsatisfactory feeding of the infant. But from either point of view it becomes clear that the problem of infant mortality is not one of sanitation alone, or housing, or indeed of poverty as such, *but is mainly a question of motherhood.* No doubt external conditions, as those named, are influencing maternity, but they are, in the main, affecting the mother, and not the child. They exert their influence upon the infant indirectly through the mother. Improved sanitation, better housing, cheap and good food, domestic education, a healthy life of body and mind—these are the conditions which lead to efficient motherhood from the point of view of child-bearing. They exert but an indirect effect on the child itself, who depends for

its life in the first twelve months, not upon the State or the municipality, nor yet upon this or that system of crèche or milk-feeding, but upon the health, the intelligence, the devotion and maternal instinct of the mother. And if we would solve the great problem of infant mortality, it would appear that we must first obtain a higher standard of physical motherhood.

" Without a moment's hesitation, I place this need as the first requirement. Other things, as we have seen, are important, but this is the chief thing. And, therefore, in the consideration of any measures for reducing the infant mortality, we must first attempt to solve the problem through the mother."

Anyone who studies descriptions of the social conditions in our towns and the history of child labour during the nineteenth century cannot be surprised at the lowering of the ideals of motherhood and family life. Rather will he wonder that anything is left of those ideals. Sir George Newman, in the book already quoted, gives a mass of evidence as to the disastrous consequences to child-life of the conditions in our towns, and concludes his chapter on " Domestic and Social Conditions " with the following words :

" It is clear that it is not external environment which only, or in fact mainly, affects the problem under consideration. During the last half-century external environment has enormously improved, and the advance has never been greater than in the last twenty-five years.* Yet infant mortality remains as grave a problem as ever. And we shall not, perhaps, be far

* " Report of Interdepartmental Committee on Physical Deterioration," vol. i., pp. 14–15.

from the mark if, in judging of the evil effects of bad housing and of poor social conditions, we give chief place to the 'laziness, want of thrift, ignorance of household management, and particularly of the choice and preparation of food, filth, indifference to parental obligation, and drunkenness' which 'largely infect adults of both sexes, *and press with terrible severity upon their children.*' * 'The people perish,' it has been truly said, 'for lack of knowledge.'"

The following quotation from Sir George Newman's next chapter gives us a gleam of hope:

"The incidence of a high infant mortality upon poor districts is, as we have seen, almost a universal experience wherever the conditions exist. The overcrowded and poverty-stricken districts of London, the dense populations on the banks of the Tyne, or in the huge manufacturing towns of the North, Glasgow, Dundee, Dublin, the teeming tenements of New York or Chicago —they all tell the same story with one remarkable exception, namely, that where by race or custom it is the practice to feed infants by the breast, the infant-mortality rate drops, even though the environment be highly insanitary. There is the instance of the low infant death-rates obtaining among Jews, Italians, Scotch, and Irish, when these races continue, even under adverse circumstances, to feed their infants by the breast."

There can be no doubt whatever that the preservation of the ideals of motherhood which create the determination to breast-feed the baby is the

* "Report of Interdepartmental Committee on Physical Deterioration," vol. i., p. 15.

one most important factor in keeping down mortality during the first year of life. Sir George Newman gives conclusive evidence to show that the countries where the practice is observed show the lowest infant-mortality rates, that times of trade depression which cause the women to stop at home and tend and suckle their infants lower the infant mortality, and that it is the universal experience of Medical Officers of Health that the death-rate among bottle-fed babies is many times greater than among breast-fed babies.

Mr. G. R. Sims, in his book " The Black Stain," shows that the mothering of the children in poor districts of our great cities is carried out more successfully by Jews, Italians, and other aliens than by the native population. It may be that the aliens in these cases are not always habitual. dwellers in towns. The Italians are, I believe, often peasants from the country districts of Italy, so it may be assumed that social heredity, to use Benjamin Kidd's phrase, has not had time to kill the national traditions of motherhood.

Motherhood as affected by race and religion. —Sir George Newman quotes from some evidence collected by Dr. Farr about fifty years ago which goes to show that in Scotland, Norway, and Sweden, where breast-feeding was the rule, the infant mortality was much lower than in Austria, France, and Russia, where this practice was neglected. England is compared unfavourably with Scotland in this respect.

It may be said at once that there is no evidence

that the women of one race have any advantage over the women of another in the ability to bear and suckle healthy children. Celt, Slav, Latin, Teuton, and Semite all start fair in this respect. The difference that exists must be ascribed not to inborn heredity but to social heredity and the customs of the race. It is to be expected, therefore, that social conditions and the influence of religion will play a powerful part.

The Jews.—Let us consider first the case of the Jews. Mr. Sims, in "The Black Stain," says:

"The instinct of family life and the deeply religious view of motherhood ensure the Jewish children, even in the most crowded slum, the affectionate regard of both parents.

"It is the contrast between the condition of the Christian children and the Jewish children inhabiting the same area and living under the same housing conditions that should, if nothing else will, bring this problem of the disregard of the value of child life home to the Christian conscience.

"It is a terrible reflection that if the population of this country were not chiefly a Christian population, the Society which now protects little children from ill-treatment and cruel neglect, and has its hands full all the year round and in every part of the kingdom, would have very little to do."

The sanctity of motherhood and family life is part of the Jews' religion. The fact that wine is used weekly in the ceremony of consecrating the Sabbath seems to have the effect of making the abuse of wine unlikely. There is little drinking

among Jewish women, especially before and after confinement. If necessary, the father and rest of the family will go short so that the nursing mother shall not want for sustenance. The expectant mother takes great care of herself, and the nurse is usually in the house some time before the confinement. The education of the children is a first thought and almost part of the religion. The standard of morals among Jewesses is high. The Jew father has a heart-to-heart talk on sexual matters with his boy at puberty and before marriage; the Jew mother does the same by her girl. The Jewish population in Sheffield is small, about 2,500, but what experience we have confirms these statements. Drink is the usual cause of overlying, and there has been no case of overlying in a Jewish family—in Sheffield, at any rate —during the last twenty years. The only case approaching child neglect I have come across was the family of a widower, and was due to the woman in charge of the children not looking after them properly and failing to keep the house clean. Jewish children are seldom brought to the Day Nursery. One of the few exceptions was the family of a Jew whose wife was ill, and the children only came for a short time. In another case some children, obviously Jewish in appearance, used to be brought, but they were the illegitimate children of a Gentile mother by a Jewish father. Jewesses seldom give birth to illegitimate children, but the standard of morals is not so high for the men. Considering the small Jew population in Sheffield, the number of

Jewish boys and girls attending secondary schools is remarkable. Jews do not allow their children to be street traders. During the last ten years there have been on the average over 500 licensed street traders in Sheffield. Only once has a Jewish boy been licensed, viz. in 1909; in this case the father, a tailor in New York, was unable to send home enough money to maintain his wife and family in Sheffield. A few years ago, when the son of a Jewish tailor became Senior Wrangler, it was not a matter of wonderment to the Jewish community. The father, though in humble circumstances, was a cultured scholar.

Many towns are able to confirm our experience in Sheffield. Dr. W. Hall, of Leeds, has produced convincing evidence of the superior physique of the Jewish children attending the Leeds elementary schools as compared with the Gentile children, and of the very great care taken by the Jews with regard to the dietary of their children. In an address delivered at a Health Congress in Leeds in 1909 he said:

"I have placed in your hands statistics which show that the children attending our poor district Jewish schools are superior in height, weight, and bony development to the children attending our good district Gentile schools—nay, even to the children attending the day schools of Ripon. I believe this to be due to the nature of the food supplied.

"A child suffering from rickets and scurvy may be cured by the administration of cod-liver oil and fruit juice, but prevention is better than cure, and I believe

that the Jews prevent their children suffering from rickets and scurvy by the free administration of oil, fresh fish, and vegetables, and that our Gentile children suffer much from the want of such fresh food.

" Further, the poor Jewish matron, when pregnant, is guarded against alcohol, prolonged outdoor or indoor labour, and from insufficient food. It has not been customary to pay much regard to these things amongst our Gentile poor. Again, 90 per cent. of poor Jewish mothers breast-feed their infants ; 80 per cent. of poor Gentile mothers do not. The Jewish child, then, starts life with a double advantage, prenatal as well as post-natal."

All reports agree that Jewesses breast-feed their children and are not prevented from doing so by having to go out to work.

Dr. Niven, of Manchester, in a Report on Infant Mortality, dated April, 1907, seeking to explain why the Cheetham district of Manchester during the decade 1894–1903 had an average infant-mortality rate of 115 per 1,000 births as compared with 184 for the whole city, said :

" There is an extensive poor and crowded quarter in this district, which comes close to the centre of the city. This quarter is inhabited by Jews. It is the custom among these Jews for married women to stay at home. The mother is thus protected before and after childbirth. There is also practically no drunkenness, and these poor people are in consequence comparatively well-nourished. They are not very clean. It is probable, therefore, that the advantage which they have secured is due to the care which the mothers

bestow on their offspring, and to their being able to give the breast."

The following paragraphs are taken from the Annual Report for 1907 of Dr. Hope, the Medical Officer of Health for Liverpool:

"It is desirable to add a few words in reference to the Jewish community, and for the purpose of illustration to take fifty poor—some very poor—Jewish families, taken consecutively. The family earnings averaged from 10s. to 30s. per week. The points which stand out are, first, that in every instance the children are well looked after, all suitably clad, and not one ragged or barefooted child seen. The beds were clean, and always a cot provided for the baby beside the mother's bed. Domestic dirtiness is uncommon, but even where it existed all the mothers seemed to realise their duty and responsibility to their children, and to act upon it. Thriftiness and sobriety were universal; no drunkenness at all. A noticeable feature which always impresses the visitor is the attention given by the mothers to the children's food. In no single instance was the mid-day meal wanting; moreover, it is usually good and wholesome, and prepared in a way which the children relish. It must be remembered that some of these families were in receipt of relief from the Jewish Board of Guardians, but others, of course, are fairly comfortably off for that class.

"With regard to the numbers of children born, the average number in the family is not large. The maximum was ten, and that only in one family; the average is five, but the figures as to the numbers who have died compare very favourably indeed with those

of the Gentile races in the same social scale. In the fifty families, the total number of infants born was 255, and the number of deaths which have taken place amongst the whole number and at various ages and by no means all in infancy, was 29—figures which speak very favourably."

Mr. Parr, the Director of the National Society for the Prevention of Cruelty to Children, states that in his experience of nearly twenty years, "proceedings against Jews for neglect or cruelty have been very rare."

Can it be doubted that the religion, traditions, and social heredity of the Jews make for good motherhood, a low infant-mortality rate, and the general welfare of children? It may be that their religious traditions have been stimulated by supreme necessity in providing for the preservation of their race during centuries of persecution.

The Irish.—As long as our records go back, Ireland has consistently had a much lower infant-mortality rate than either Scotland or England. Since 1890 the English rate, which was much higher than the Scottish, has come nearer to the Scottish, but both are still considerably higher than the Irish. The infant-mortality rates in the Irish country districts have been remarkable when compared with the standards which we have hitherto regarded as attainable. They are less remarkable now owing to the recent improvement in the English rates.

The following table gives a comparison between English and Irish infant-mortality rates during 1916:

Infant Mortality according to Age during 1916 in Different Classes of Administrative Areas of Ireland and of England and Wales

Age	Ireland			England and Wales				
	"Nineteen Town" Districts	*Remainder of Ireland*	*Ireland*	*England and Wales*	*London*	*County Boroughs*	*Other Urban Districts*	*Rural Districts*
Under 1 month .	40.37	30.44	33.47	36.90	32.02	39.55	36.35	36.27
1–3 months . .	25.15	13.07	16.75	16.83	17.14	19.77	15.76	13.30
3–6 months . .	24.65	10.11	14.55	15.17	17.29	18.25	13.76	10.81
6–12 months . .	30.74	13.32	18.64	22.31	22.78	28.22	19.96	15.62
Under 1 year . .	120.91	66.94	83.41	91.21	89.23	105.79	85.83	76.00

Infant and Young Child

The appended lists show the English and Irish counties with the lowest infant-mortality rates during 1916:

Ireland		*England and Wales*	
Roscommon	35	Radnorshire	53
Leitrim	46	Oxfordshire	55
Mayo	51	Berkshire	58
Kerry	51	Isle of Wight	59
Galway	53	Somersetshire	60
Clare	55	Surrey	61
Meath	56	Southampton	63
Monaghan	56	Wiltshire	63
Cavan	59	West Sussex	63
Tipperary (N.R.)	60	Shropshire	64
Londonderry	61	Lincolnshire (parts of Holland)	64
Fermanagh	62	Gloucestershire	66
Sligo	64	Northamptonshire	66

In the Report on Ireland prepared for the Carnegie Trust, Dr. E. Coey Bigger shows that eight counties—Roscommon, Leitrim, Wicklow, Mayo, Tipperary (N.R.), Cavan, Galway, and Longford—had infant-mortality rates below 60 per 1,000 births during 1915, and that in them 17.1 per cent. of the births of Ireland occurred. Of these counties, Galway, Mayo, Leitrim, and Roscommon, all in Connaught, are perhaps the poorest counties in the country.

Dr. Bigger regards a reduction of the infant-mortality rate to 50 in the country and 80 in the towns as an easily attainable ideal for Ireland.

The Mother

A few sentences extracted from the Report furnish a good part of the explanation of the low infant-mortality rates in the Irish counties:

"The Irish mother is celebrated throughout the world for the affection she has for her offspring" (p. 45).

"The practice of breast-feeding is almost universal among the poorer mothers in the country, and is still very common in town" (p. 45).

"The figures (for illegitimate births) vary from 0.8 per cent. in Connaught to 4 per cent. in Ulster" (p. 47).

"Intemperance in Ireland is now much less common than formerly, and although still all too prevalent among men, it is rare among women, especially in the country" (p. 44).

"In other countries one of the chief diseases of the parents which has a considerable influence in causing infant mortality is syphilis. This has already been referred to as one of the causes of abortions, miscarriages, prematurity, and marasmus in infants, and it has been shown that, apart from Dublin and Belfast, the disease is not common in Ireland. The deaths of infants stated to be due to syphilis amount to 0.7 per cent. of the whole; and though this figure is probably too low, the number cannot be large. Syphilis is not accountable for many of the deaths of infants in Ireland. Gonorrhœa, while not causing the deaths of infants, is often associated with sterility in females. It is also a most usual cause of a serious though non-fatal disease of infants—ophthalmia neonatorum, which, if neglected, causes blindness. Ireland is, however, very free from blindness caused by this disease" (pp. 43–44).

Syphilis, alcohol, and heavy work by the mother in the later part of pregnancy are given as the chief causes of deaths of infants ascribed to "prematurity," etc., and the following figures, taken from the Report, confirm what is said about the temperance and freedom from syphilis of Connaught mothers:

DEATHS OF INFANTS FROM PREMATURITY

Leinster . . .	10.9	per 1,000 births
Ulster . . .	10.2	,, ,,
Munster . . .	5.2	,, ,,
Connaught . .	2.0	,, ,,

DEATHS FROM SYPHILIS AT ALL AGES

Leinster . . .	2.1	per 1,000 deaths
Ulster . . .	1.4	,, ,,
Munster . . .	0.38	,, ,,
Connaught . .	0.12	,, ,,

Dr. Bigger draws attention to the poverty in the country districts, to the practice of midwifery by untrained handy women, to the high percentage of deaths with no doctor in attendance at the last illness, and to the fact that families are larger than in England and Scotland.

It is an extremely noteworthy fact that in the west of Ireland, where these low infant-mortality rates prevail, rickets is, practically speaking, an unknown disease. The Carnegie Report on Scottish Mothers and Children records a similar association of breast-feeding, low infant mortality-rates, and

absence of rickets, coupled with good teeth, among the children of the Outer Hebrides, a large number of whom live in the remarkable " black houses."

It would appear that the low infant-mortality rates in Connaught are attributable to freedom from alcohol and syphilis and the determination of the Connaught mother to be a mother. The country districts of Ireland have suffered in the past from absentee landlords, but the babies in them have not suffered from absentee mothers.

Bradford compared with Connaught.—In a lecture published in 1918 by the National Baby Week Council, Dr. C. W. Saleeby gives a most interesting comparison between Bradford and Connaught. Referring to the prosperity of Bradford and the splendid and well-directed efforts of its model Infant Welfare Department with an expenditure of £20,000 a year, he points out that, in spite of this effort, the infant-mortality rate in 1916 was 132, the birth-rate being only 13.2. He then goes on to show that in Connaught, where there were " poverty," " ignorance," and adverse conditions as regards " medical and nursing resources," " housing," and " public effort," and the birth-rate is high, the infant-mortality rate is only about 50, and that the infant-mortality rate in Roscommon is " little more than one-fourth of that of Bradford with its rare babies." " But the Connaught babies have healthy mothers with an extreme minimum of syphilis, who stay at home and feed them as no science can feed them,

and the babies live," while in Bradford "practically all the mothers go out to work."

Sheffield compared with Bradford.—The following comparison between Sheffield and Bradford is of interest because in Sheffield, unlike Bradford, the mothers of babies have not gone to work in the factories to any appreciable extent during the War:

INFANT-MORTALITY RATE AND BIRTH-RATE IN SHEFFIELD AND IN BRADFORD

Year	*Birth-rate*		*Infant-mortality rate per* 1,000 *births*	
	Sheffield	*Bradford*	*Sheffield*	*Bradford*
1909	29.8	18.8	119	116
1910	28.1	18.6	127	127
1911	27.7	19.0	141	138
1912	27.7	19.4	107	99
1913	28.2	19.9	128	127
Average 5 yrs. 1909–13	*28.3*	*19.1*	*124*	*121*
1914	27.3	19.7	132	122
1915	25.5	17.5	133	123
1916	25.3	17.5	109	119
1917	21.7	13.2	104	131
1918	20.7	13.2	129	123
Average 5 yrs. 1914–18	*24.1*	*16.2*	*121*	*124*

It will be noticed that, comparing the quinquennium before the War with the quinquennium of the War, the birth-rate in both towns has

declined, and that in Bradford the infant-mortality rate has increased from 121 to 124, whereas in Sheffield the rate has declined from 124 to 121. The figures, as far as they go, tend to support the contentions in Dr. Saleeby's comparison.

Infant mortality of Dublin.—Throughout Ireland the infant-mortality rate has always been low compared with other countries, and even in the towns, as, for example, Dublin, it has never been so high as one would expect from the social and sanitary conditions and the high general death-rate. In the case of Dublin the Carnegie Report points out that it is not an industrial city, and that the mothers " are able to remain at home and tend and nurse their children."

English and Irish mothers in Liverpool.—Dr. Hope, giving evidence before a Committee of Inquiry into the health of the city of Dublin, attributed the lower infant mortality among the Irish population in the slums of Liverpool as compared with the English population to the fact that the Irish mothers suckled their babies much more commonly than the English.

Racial traditions of motherhood must be very strong to survive exposure to conditions such as are to be met with in the poorest parts of Liverpool and Dublin, and one cannot help feeling that religion and the inspiration of the Holy Mother must play a part in producing this result. The beautiful picture of a peasant mother in the frontispiece of the Irish Carnegie Report seems to be the recognition by the Irish author of this train of

thought. It may seem a paradox that a Church with a celibate clergy should have this effect, but the mere fact that the clergy do not have their imagination dulled by the everydayness of family life may enable them to keep the ideals on a higher plane for those to whom they have to act as spiritual directors.

Italian ideals of motherhood.—If we turn to the Italians in this country, who also preserve their ideals of motherhood so wonderfully, in spite of adverse circumstances, in many of our large cities, is it not conceivable that they have acquired ineradicable impressions in their upbringing in the country of the beautiful Madonnas? We are not going to raise the ideals of motherhood and family life by science or pure reason alone, and the example of the Jewish, Irish, and Italian mothers may point the way to a more inspiring method of applying our religious ideals.

The Society of Friends and family life.—This is an example of a small religious community which has succeeded in incorporating in its code of ethics a very high standard of family life. The infant mortality among them is very low.

It may be said that the small size of the Society (there are about 20,000 Quakers in the United Kingdom), and the fact that there are few, if any, Quakers living below the "poverty line," make it unfair to compare them with communities which include many poor persons. It may, however, be fair to compare them with the more well-to-do portion of our population in certain particulars.

The Mother

The Central Office of the Society of Friends keeps a record of the births and deaths of all members of the Society. When both parents are Quakers their children become members of the Society by birthright. It is possible, therefore, to obtain the number of births and the number of deaths under one year over a period of years. During the eight years 1910–1917 there were recorded 1,024 births and 35 deaths under one year, which is equivalent to an infant-mortality rate of about 34 per 1,000 births.

The Secretary of the Society of Friends has kindly supplied me with figures relating to twenty-five years before 1910. During this period, 1885 to 1909, there were 3,959 births and 236 deaths of children under one year, equivalent to an infant-mortality rate of 60. If the period is divided into three, we find that during 1885 to 1893 there were 1,539 births and 106 deaths under one year; during 1894 to 1901, 1,211 births and 74 deaths under one year; during 1902 to 1909, 1,209 births and 56 deaths under one year. Thus, the infant mortality in the Society since 1885 has been as follows:

1885–1893	. . .	69	per 1,000 births
1894–1901	. . .	61	,, ,, ,,
1902–1909	. . .	46	,, ,, ,,
1910–1917	. . .	34	,, ,, ,,

I am indebted to a medical and other members of the Society for further information which I believe will be of interest. Quaker mothers almost invariably breast-feed their babies, not as the result

of any direct teaching on the subject, but because they devote themselves to the home and social service, and have an instinctive feeling that it is their duty to their children.

Early marriage is commoner than among persons of corresponding social status, because the much simpler life lived by the Quakers renders early marriage possible. Definite talks on sex questions are given by most parents to their children, beginning at quite an early age, such as four or five years, when questions begin to be asked. Illegitimacy is practically unknown. Alcoholism and venereal disease are very rare.

A chief factor in enabling this high moral standard to be reached has been that for generations the boys and girls have been brought up as equals. In the place of worship and in the home there is no distinction, and the same moral standard is expected of each sex when they grow up. Girls and boys have equal education, and the girls of a family are not brought up to wait on the boys. The form of worship and the life expected of members of the Society teach self-restraint. They realise that there is an element of the divine in every human creature, and that to defile it would be a sin. A great point is made of talks at the schools on social subjects.

One of my correspondents writes : " The Society certainly planned to give *all* its children a good education, and our schools have done splendid work in the past, especially in the way they have emphasised the need for educating our girls quite

as well as our boys, even though they have not quite managed to carry out the magnificent recommendation of our founder, George Fox, that '*our girls shall be taught all things civil and useful in creation.*' It is this equal ideal, I think, which makes the relationship between brothers and sisters among us curiously different from that in many families, and I know it strikes many outsiders very strongly. The girls of the Quaker family are not sacrificed in order to send the boys to college ! "

Parenthood is taken very seriously by the Quakers, and a considerable portion of their book, " Christian Discipline of the Society of Friends," is devoted to advice to parents. The following extract from Part II., " Christian Practice " (pp. 66 and 67), dealing with a matter which is very important from the point of view of the education of children for parenthood and the prevention of immorality, illegitimacy, and venereal diseases, is a good example :

" It is our earnest conviction that it is the duty, as it is also the privilege, of parents to teach their children the main facts concerning the formation and functions of their own bodies, and concerning the manner in which they have come into the world. This can be done gradually in a simple and natural way, according to the growing intelligence of the child. By answering the child's questionings, and by making use of illustrations from nature, it should be possible to prevent any morbid thoughts, and to impress upon the child's mind the beauty, purity, and holiness of

life. The fullest confidence between parents and children may well be encouraged in this matter. When it is not dealt with in the way suggested, the information which is naturally sought for by the inquiring child will often be communicated by others in a manner calculated to soil the mind and to work immeasurable harm in the future. The responsibility for the wise handling of this vital subject should be shared by both parents."

If we were all Quakers the complex problem of infant mortality and child welfare would be easily solved. One does not, however, suggest that as the way out. It is not the ideals of the Churches that are at fault; it is the failure to incorporate those ideals in everyday conduct in such a manner as to raise the regard for motherhood and the sanctity of family life. Breast-feeding, for example, ought to be regarded as a religious duty. It is not so regarded. Have the Churches been too much concerned in what one might call the theory of religion to give to these all-important subjects the attention which they deserve?

CHAPTER IV

The Training of the Mother

THERE is not much satisfaction to be got from doing any job unless you know how, and a mother's job is no exception to the rule. Efficient housewives are more important than bricks and mortar in the making of healthy homes. In addition to knowing about the feeding and rearing of children, the mother needs to be an expert in housewifery, cooking, laundry work, and needlework. In the days of our great-great-grandmothers most of the population lived in the country, and girls learnt these things from their mothers, those eighteenth-century mothers whom Napoleon feared. Nowadays most of us live in towns, and girls leave school at 13 or 14 years of age to go into shops, workshops, and factories, and at the end of their day's work are in no humour to learn housewifery; and if they were, the chances are that the town mother, who has not been properly taught herself, would not be in a position to teach them.

We have not yet learned how to live in towns.

Training of future mothers.—The change from country life to town life makes it essential that every girl's education should include a thorough training in cooking, housework, laundry work, needlework, and mothercraft. The mother's is a

skilled trade, and as urbanisation has abolished the apprenticeship system we have to find a substitute. One imagines that the apprenticeship system must have been kept up in the country districts of Ireland, because of the low infant-mortality rates in Leitrim, Mayo, Galway, and Roscommon. Nowadays the town girl may, before leaving school, get a smattering of some of the subjects enumerated, but after a few years' work in an office, shop, or factory she soon forgets what she has learnt, and is probably little qualified to run a house when she is married. At the present time the curriculum of elementary education is too crowded and too short to get the subjects in, and, in addition to this, there are not enough domestic economy centres to give the teaching. Also, if the estimates have to be cut down, domestic economy is often the subject which goes to the wall. When half-time education is continued up to 18 years of age, it ought to be possible for every girl to get a really good knowledge of domestic economy and to begin her married life with the confident feeling that she knows something about her job. Many of the hopeless slatterns with neglected homes and families whom we come across have developed from well-intentioned girls who never learned how to manage a house, and who, as the babies came and the work increased, have simply let things slide and perhaps taken to drink at the finish.

Lack of domestic servants.—Another reason will emphasise the need for thorough teaching in

housecraft and mothercraft. The number of male workers has been greatly reduced by war casualties, and in order that we may pay our way as a country women will be required to do work of national importance. The war will leave us with a paucity of domestic servants, and hence fewer women will learn house management through domestic service. Incidentally the middle-class woman will have to become more efficient as a mother and a housewife, to her own great gain. All this will help to put scientific housewifery on a new footing.

Training of existing mothers.—The instruction of the future mothers in domestic economy and mothercraft is only one part of the problem; we have also to do what we can to improve the efficiency of existing mothers, whose education in these matters has been neglected. This can be done by the institution of sewing and cookery classes in connection with Maternity and Child Welfare Centres, Mothers' and Babies' Welcomes, and Schools for Mothers. Sir George Newman's Report for 1917 shows that 286 of such institutions received grants from the Board of Education for the year ended March 31st, 1918, representing an increase over the number for 1915 of 129. The most hopeful method would seem to be the holding of classes for mothers by the Education Committee at the schools which their daughters attend. The grant of the Board of Education is available for such classes. The mothers, as a rule, feel a great interest in the cookery competitions and exhibitions

in which the scholars take part, and one would suppose that this is the most likely way of arousing their interest and getting them to attend classes themselves.

In the poorest parts of a large city one finds whole streets and districts where the use of a needle is almost unknown. One wonders what is the effect on a mother whose knowledge of needlework and cooking is of the scantiest if her daughter is turned out by the school an expert in these matters. Does the mother learn from the daughter, and is she stimulated to attend evening classes on these subjects instituted for mothers by the Education Committee, or does she look with scorn on the acquirements of her daughter ?

Of course, what has been done up to now in the way of training for motherhood has been absurdly inadequate, and yet it seems impossible to exaggerate the effects that would result from a thorough training of the women of the nation in mothercraft and housecraft. Certainly the solution of the housing problem would be hastened thereby, because well-trained women would not put up with the primitive housing arrangements which have hitherto been provided for them in so many cases. Miss M. V. Palmer, author of " The Commonwealth Cookery Book," and organiser of domestic subjects to the Birmingham Education Committee, who formerly occupied a similar position at Sheffield, has kindly prepared for me the following suggested schemes for helping existing mothers and training school girls :

The Training of the Mother

Suggestions for Helping Existing Mothers

Every evening school should include not only Lectures on all domestic subjects, but also on Mothercraft (or Maternity), in its curriculum.

Local Education Authorities should arrange *afternoon* Lectures on—

Cookery:
- Simple Household.
- Invalid.
- Meals for children.

Laundrywork.

Housecraft
- (Special attention being paid to labour-saving devices).

Needlework:
- Dressmaking. Tailoring. Millinery.

Hygiene:
- First Aid. Home Nursing.

Maternity.

It is important that these Lectures should be popularised by first getting into touch with Women's Associations, e.g. the Women's Co-operative Guilds, Mothers' Meetings, Women's Institutes, etc.

Prizes might be given—even examinations have been known to act as incentives.

Small Exhibitions, open to the public, should be held at the end of each course.

The Lectures should generally be given in some accessible building, and one well known to the general public, e.g. an Elementary School, Church or Chapel Room, Women's Institute, Public Hall.

SCHEME I

Suggested Scheme of Instruction in Domestic Subjects for Girls of School Age

1 year in Elementary School.
2 years in Day Continuation School.

(It is taken for granted that at least three hours per week will be given as usual to the teaching of Needlework in Elementary Schools.)

Place of Instruction	*Age*	*Time per Week*	*Length of Course*	*Subjects of Course*	*Total No. of Hours*
Elementary School	yrs. 12½ or 13–14	1 day of 5 hrs.	1 year	Simple Housewifery, Laundrywork, and Cookery	210
Day Continuation School	14–16	4 hrs. (i.e. whole morning or afternoon)	1 term of 13 weeks in each of 2 years (i.e. 2 terms, or 26 weeks, in all)	Combined Domestic Subjects (Housecraft) i.e. the planning and carrying out of all the work of the house. Marketing, portioning of income, thrift, making of polishes, mending and making, labour-saving devices, feeding of infants and young children, personal hygiene, First Aid, and home nursing	104

SCHEME II

SUGGESTED SCHEME OF INSTRUCTION WHEN EDUCATION IS CONTINUED UP TO 18 YEARS OF AGE

As in Scheme I., one day per week for 42 weeks would be given during the last year of Elementary School life. Then, during the years 14 to 18, *instruction in the general duties of a housewife* would be given in the Day Continuation Schools as follows :

Age	*No. of Hrs. per Week*	*Length of Course*	*Subject*	*Total No. of Hours per Year.*
yrs. 14–15	4 hrs (i.e. a whole morning or afternoon)	1 term of 13 wks.	*Combined Domestic Subjects* (or Housecraft), i.e. the planning and carrying out of all the work of the house. Simple mending. Marketing, portioning of income, thrift, insurance, making of polishes, labour-saving devices, personal hygiene, First Aid, and home nursing. Gardening should be included where possible.	52
15–16	do.	do.		
16–17	do.	2 terms (A and B) of 13 wks. each	A TERM. *Household Cookery*, i.e. the preparation of menus and of meals for families of various sizes, and invalid cookery, special attention being paid to food values and to cooking in bulk. Experiments should be encouraged. B. TERM. *Needlework, simple dressmaking and tailoring*, i.e. making of patterns, cutting out and making (both by hand and machine) of all kinds of under-garments. Making a skirt and blouse. Making of simple garments for small boys. Adaptation and renovation. N.B.—Design must be included in both the Needlework and Dressmaking Courses.	104
17–18	do.	2 terms of 13 wks. each	*Infant care and management*, including attendances at crèches and nursery schools and actual handling of infants. Treatment of children's ailments. First Aid and home nursing. Care of the mother's health. Cutting-out and making baby-clothes. N.B.—No long clothes.	104

Infant and Young Child

If possible, during the second and third terms, two hours per week should be spent as follows :

2nd Term—Cookery (including the preparation of menus and of meals for families of various sizes, invalid cookery, etc.).

3rd Term—Needlework or simple dressmaking (including design).

CHAPTER V

Child Poverty

As regards child welfare, I believe that the money question is of very great importance. No one knows what the nation loses through child poverty.

Child poverty is a disgrace to any nation, and is expensive ultimately by filling workhouses, hospitals, reformatories, asylums, and prisons.

The victims of child poverty may, roughly, be divided into five classes :

1. The children of widows and disabled breadwinners.
2. The children of large families where both parents are alive and the breadwinner earns a wage insufficient to meet the needs of the family.
3. The children of a man who earns a big enough wage but persists in giving his wife an insufficient sum every week to keep house on.
4. The children of neglectful and drunken parents.
5. Illegitimate children.

Children of widows and disabled breadwinners.—The first of the five classes is no doubt

humanely dealt with by progressive Boards of Guardians, but it is considered a disgrace by many people to have to apply to the Guardians, and a good deal of want is often endured before application is made. It is impossible for a working man to make provision so that his wife and children can " carry on " if he is cut off prematurely, or permanently disabled. Let us take an example. A woman well able to earn her own living marries a man who is an exemplary husband, and they have six children. The husband dies from pneumonia when the eldest child is twelve. But for her children the mother could again earn her own living. She has done nothing to merit any disgrace. She ought to receive an honourable allowance free from the taint of pauperism or charity, to enable her to maintain a home for her children until they are started in life.

This class of child poverty, one feels, could be adequately dealt with by the adoption in this country of what are known in America as " Mothers' Pensions," or, as their principal advocate, Judge Neill, would prefer to have them called, " Child Pensions." I believe it was Judge Neill who pointed out that there is ancient historic precedent for this system, in that Moses was boarded out with his own mother, and Pharaoh's daughter paid the " mother's pension." Opinion in this country is undoubtedly growing in favour of giving the system a trial.

The children of large families.—Children of the second class might also be dealt with by a

system of child pensions. When there are more than four children in the family under school-leaving age simultaneously, an adequate allowance for each child exceeding the number of four would perhaps meet such cases. It is mathematically impossible for a man and his wife and six children below 14 to be adequately maintained on a labourer's wages. Even with the greatest thrift the children must be underfed, insufficiently clad, and improperly housed. Yet there are many such families. If we, as a nation, are in earnest in this crusade we shall see to it that the children in a large family have proper support. How can one fix a living wage which is suitable alike for a single man, a single woman, a man and his wife and three children, and a man and his wife and six or eight children ? The State must come to the rescue and recognise that a woman who is bringing up a large family well is doing good work. The dignity of motherhood demands that any assistance given by the State in such cases be free from the taint of pauperism or patronising charity.

Pre-natal influences count for something. The advent of a new-comer in a normally prosperous family is hailed with joy. Can it be so if the parents have already all they can do to make both ends meet, and know that one more mouth to fill will mean their sinking below the poverty line ? Is it remarkable if the woman in such circumstances has recourse to dangerous operations or to drugs which may cost her her life ? We must abolish the unwanted child and help the super-mother.

The principle of making allowance for the maintenance of children has been recognised in the income-tax for some years, and since the outbreak of war a system of war allowances varying according to the size of the family has come into operation on a huge scale, and those of us who have been intimately in contact with its working are able to say that it has been very little abused. In very many cases homes have been improved, necessary furniture has been obtained, and the children have been better fed and clothed than ever before. This was especially the case where the families received the half wage of the man who had been "called up," in addition to the Army allowance. When the school-leaving age is still further raised, and children continue their education as half-timers to 18 years of age, there will be all the more reason for assisting the large families.

I do not think that the cost of thus assisting large families will be so very great.

At the 1911 census the population of Sheffield was about 450,000, of whom 200,000 lived in houses of four rooms or less. The families which would require assistance in the manner suggested would be mostly included in the 200,000 living in the small houses.

It is possible to obtain from the census the number of those families in which there were more than four children under the age of 10 simultaneously at the time when the census was taken, and also the number of such children. The total of such children exceeding the limit of four per family

in Sheffield in 1911 was 835, and if an allowance of 5s. per week had been paid in respect of each of them the total annual cost would have been £10,855. A penny rate in Sheffield brings in nearly £9,000, so that the cost for children under 10 would be equivalent to a rate of about 1¼d. in the £, but there would be some savings to put against this in decreased out-relief, etc. One cannot obtain from the census the same particulars for children under the school-leaving age of 14, but the cost would certainly be less than a 2d. rate. I only mention the rates for the purpose of giving some idea of the cost. Most people will agree that assistance of this kind to both widows and large families should be a national and not a local charge

I would further suggest that these child pensions should be administered by the local health authorities, who already possess, through their health visitors, much knowledge of the families and would be able to ascertain if the pensions were being rightly used.

The payment of an adequate allowance for each child boarded out with its own mother would not exceed one-third of the cost of keeping such child in a Poor Law institution, and the allowances in such cases would be really preventives of poverty and want, with all their direful results to the physique of the children, instead of assistance from the Poor Law after the breaking-up of the home and the occurrence of destitution. I think that the difference in cost between adequate and timely allowances paid to the mothers and the necessarily

belated payments made by the Guardians in respect of many such families would be balanced by the lessened cost of institutions and the improved health of the children, the latter of which gains is not to be expressed in money value.

It need not unduly worry us that the cost of child pensions will to a large extent fall on bachelors and the childless. We are all working for social evolution and the future, whether it be a Christian, a Socialist, or a Jewish millennium to which we look forward. We do not exactly want to punish the conscientious objectors and shirkers who fail to join up in the matrimonial army, but I know of no reason why they should be left out in the cold.

Children of neglectful parents.—The third class of victims of child poverty are the children of indifferent fathers who do not seem to realise their responsibilities and appear to be unconscious of neglect till their attention is drawn to the matter by an outsider. As the border-line between parental indifference and parental neglect is ill-defined it may be well to consider this and the fourth class together.

It used to be quite a common practice before the War for men earning big wages to "give the wife a sovereign to keep house on" and spend the rest on themselves, and some of the cases were only brought to a head by war prices and the fact that the consequently increased insufficiency of the sovereign meant semi-starvation and neglect for the wife and children. The War also brought to

light the widespread ignorance among wives of the amount of their husbands' earnings, and even of the places where they worked. At the outset of the War many firms continued to pay half wages to their employees who enlisted, and the comments of the surprised wives when they received their husband's half-wages for the first time were, to put it mildly, sometimes forcible.

This question of the allocation of a reasonable proportion of a man's earnings to the maintenance of his family can be, and no doubt is being to some extent, solved by the change in the standard for the maintenance of children which is now demanded by public opinion. For example, when the National Society for the Prevention of Cruelty to Children began its work the standard it aimed at was necessarily a low one. It was a pioneer society supported by voluntary subscriptions, and it had to feel its way and gain the confidence of the public. Most of the work was done by patient supervision and admonition. The cases which were taken into Court were therefore, as a rule, cases of gross neglect and actual physical cruelty, and it was almost necessary to prove to the magistrates that the children had actually suffered in health. Now, thanks to the splendid work of this Society, followed as it has been by valuable legislation such as the Children Act, and the establishment of Child Welfare Departments and School Medical Inspection, the standard has been raised, and it is not necessary to wait till the children have suffered before taking action. It is

enough to prove to the magistrates that the children of parents in receipt of a good income, even if fairly well nourished, are verminous, clad in rags, and have no proper bedding or bed-clothes, to secure a conviction. The pleasant feature of this raising of the standard is that it results from the opinion of all classes. Most of the reports of neglected children which we receive come from neighbours who refuse to look on in silence when children are not being fairly dealt by.

Of course, most cases of child neglect are due to drink, and are very difficult to deal with. If the man drinks, the wife often makes a brave show, but if the woman drinks the husband has no chance, because the wife, when he is away from home, pawns the furniture and the children's clothes and spends the proceeds on drink.

There is no very satisfactory penalty. A fine only further impoverishes the children. A term of imprisonment may put the children temporarily in the care of the Guardians, but the trouble usually begins again when the prisoner is released. An order for committal to an Inebriates' Home can only be obtained after three convictions or on proof that the person convicted is a confirmed drunkard. Sometimes the defendant agrees voluntarily to go to a Home in order to escape a term of imprisonment, but there are not enough Homes for the reception of such cases. Very frequently the only satisfactory solution is the formal adoption by the Board of Guardians of all the children till they are 18 years of age.

More use might be made of the Children Act. It may not be generally known that " any person who in the opinion of the Justices is acting in the interests of a child " which is being neglected may get a warrant for its removal to a place of safety and take proceedings against the person guilty of neglect. Unnecessary delay and suffering to the child are often caused by the erroneous impression that the National Society for the Prevention of Cruelty to Children is the only body which has power to act.

In Sheffield the Maternity and Child Welfare Department occasionally finds it extremely useful to put the clauses of the Children Act in operation in cases where notices and warnings are ignored. A warrant is obtained for the removal of the children to a place of safety, and proceedings are taken against one or both parents for neglect. In some cases the parents are put on probation, and an order is made for the children to remain in the Guardians' Homes till their own home is fit for their reception. In other cases a term of imprisonment is inflicted, and the children at any rate get a respite and live under decent conditions for a time. It is remarkable how, in some cases—and the records of the N.S.P.C.C. are quite convincing on this point—the term of imprisonment has the effect of " pulling up " the parent and ultimately securing for the children a restoration of reasonable home conditions. We find that the fact that the woman inspector or school nurse occasionally has to take part in proceedings against parents who

neglect and ill-treat their children in no way disturbs her friendly relations with mothers who are anxious to do their best for their children.

Illegitimate children.—The fifth class of victims of child poverty have a much worse time now than they had in the Middle Ages. It is no credit to Christianity that it should be so, or that the death-rate among them should be twice what it is among legitimate children. One need not labour the point that the child is in no way responsible for the stigma cast upon it, and that if properly looked after it may grow up to do as useful work as anybody else. If I were an illegitimate child I should like to think I had as fellow-sufferers in this respect the greatest genius the world has ever known, Leonardo da Vinci, and the Renaissance scholar, Erasmus.

The N.S.P.C.C. is at present promoting a Bill which will greatly improve the chances of the illegitimate child, and which deserves general support. The Bill proposes to throw more responsibility on the father and to give the mother a better chance of dealing with her burden. Proceedings for affiliation will be made easier, the magistrates will have power to increase the allowance paid by the father, and the illegitimate child will become the ward of a court of summary jurisdiction empowered to act on its behalf. If the Bill becomes law a great advance will have been made in this question. A recent Order of the Local Government Board gives local authorities new powers to expend money in the interests of the illegitimate child,

and further benefit may be expected from the efforts of the recently established National Council for the Unmarried Mother and her Child. Altogether, there are signs of an awakening, and one may hope that steps will be taken ere long to remove this blot on our national reputation.

CHAPTER VI

An Efficient Medical Service

THE mother needs to be backed up by an efficient Medical Service.

Infant hygiene and the medical curriculum. —The first point to be insisted upon is that the whole question of the management and feeding of the infant requires to be given a proper place in the medical curriculum. One realises that the curriculum is overcrowded, but the importance of the subject demands that it should have proper attention and that less important subjects should give way to it. Infant management is not included in Medicine, Surgery, or Public Health. It is, perhaps, supposed to be included in Midwifery, but as a rule it receives scant attention. The lecturer on Midwifery is primarily an obstetrician, and as a rule is not an expert on the management of infants. His concern is with the mother, not with the baby. Sir A. R. Simpson, who for so long occupied the Chair of Midwifery in the University of Edinburgh, made a remarkable confession in his introduction to the translation of Budin's book on the nursling: "When I look back on my own professional and professorial life," he wrote, "no memory stings me with more sharp regret than the thought of the too little heed I

have given to the needs of the neonate." It has been the fashion for some years to talk about the ignorance of mothers as one of the chief causes of infant mortality, but we have only just realised that the medical profession knew very little about the matter, and that there was no one to teach the mothers.

As the result of infant consultations and the work of a few medical men and women who have devoted special attention to the subject, we now know that such an elementary matter as the management of breast-feeding cannot be left to the instinct of mothers, aided by the advice of a more or less ignorant grandmother, monthly nurse, or midwife. There has been no one to teach the monthly nurse or midwife, so that it is not surprising that the newly-born infant has been the victim of many curious superstitions and traditions. Dr. Eric Pritchard has made the valuable suggestion that at each training school for midwives a special member of the medical staff should be told off to instruct the pupils in infant management. For this purpose it would, of course, be necessary to make new appointments of men or women of special experience. The staff of a hospital for women are appointed on account of their skill as obstetricians or gynæcologists, and it is very necessary in the interest of the babies that there should be one member of the staff who has special knowledge of infant management. There can be no doubt that great advances have been made in our knowledge of this subject in the last ten or fifteen years, and

that there would now be found medical men and women capable of doing excellent work in such appointments.

It is also advisable that there should be an ophthalmic surgeon on the staff, although his services might not be required very frequently.

In January, 1913, the Society of Medical Officers of Health unanimously passed the following resolution :

" That, with a view to the reduction of infant mortality, the Council of the Society be asked to consider the best method of securing that the subject of infant management be given a more important place in the medical curriculum."

Inquiries made early in 1914, by the National Association for the Prevention of Infant Mortality, of all the medical schools and children's hospitals where teaching is given, throughout the United Kingdom, elicited the fact that the subjects of infant hygiene and management receive very little attention in the medical curriculum. The Executive Committee of the Association thereupon made the following recommendations :

" (1) That degree- and licence-conferring bodies should require from each candidate for the final examination in Medicine a certificate of having attended a course of clinical instruction on infant hygiene, to include lectures or demonstrations on the management of infants, and the prophylaxis and treatment of infantile diseases.

" Such a course should include instruction in the

part played by the State in infant hygiene, with special reference to the duties and functions of the medical practitioner, the midwife, the hospital and local sanitary authorities, and the health visitors.

" (2) That the certificate required from candidates in Midwifery for the final examination should include evidence that they have received instruction in antenatal pathology and hygiene, and in the management of infants during labour, the puerperium, and the period of lactation."

In the meantime the newly qualified medical practitioner has a great advantage over his predecessors in the fact that he can attend one of the many Infant Clinics that are now in existence.

If he intends to go into general practice he will be well advised to follow up his residential hospital appointments by a few years spent as Assistant Medical Officer in several of the special services which have recently sprung up. He will be in a much stronger position to undertake general practice if he has, for example, done six months' work at an Infant Clinic and a like period at a Venereal Diseases Clinic and a Tuberculosis Dispensary and as a School Medical Officer. He will thus have acquired information about child management and children's diseases which will be invaluable to him in practice, and will at the same time have been in the receipt of a reasonable salary, so that no hardship will have been entailed by the delay. The recently qualified medical practitioner who has no knowledge of infant management is at the mercy of the monthly nurse when

she reports that " there seems to be no milk," or that " the milk is very thin," or " doesn't seem to be doing the baby any good," and has to assent in consequence to quite unnecessary weaning. Unless he is well up in the details he cannot hold his own against a half-hearted mother or a tricky monthly nurse.

The first point, then, with regard to the Medical Service is that much greater attention must be given by the medical schools to the question of infant management, so that each new practitioner may start practice with a good knowledge of the subject.

The family doctor.—In whatever manner the Medical Service is reconstructed, we need a system in which each family will have its family doctor. The relation of the family doctor to the special institutions, such as School Clinics, Tuberculosis Dispensaries, Maternity and Child Welfare Centres, and Venereal Disease Clinics, will have to be determined. The family doctor must be linked up with the consulting surgeons and physicians, and the hospitals, convalescent homes, and also with midwives, district nurses, and mothers' helps, so that his patients may have the benefit of these services in time of need. More lying-in hospitals are needed, and more beds for the accommodation of pregnant women suffering from syphilis, as it is now recognised that this is a satisfactory time for treatment from the point of view both of the mother and of the unborn child. More children's hospitals, convalescent homes, and open-air schools are re-

quired. Especially do we need more hospitals for crippled children on the lines of the Lord Mayor Treloar Hospital at Alton.

A Dental Service.—Besides this, arrangements must be made for dentists to look after the teeth of the children. This is being done to some extent with regard to the children of school age by School Clinics, and power has recently been given to Maternity and Child Welfare Centres to establish Dental Clinics. The system will have to be generally extended. There is probably no more widespread cause of ill-health than bad teeth, and certainly none which has been more neglected hitherto. We need many more dentists, and the prohibition of dental practice by unqualified and untrained persons.

The Poor Law Medical Service will obviously become involved in the changes which take place.

Out-patient Departments.—Another matter urgently requiring attention is the reform of Out-patient Departments. These are at present swamped by patients who ought never to be sent there. Mothers who take their children to Out-patient Departments are frequently required to spend the whole day in the waiting-room, to the great detriment of their homes. Out-patient Departments ought to be restricted to accidents, cases requiring special treatment, and those cases which are sent by a general practitioner for a consultant's opinion. This will only become possible when there is a satisfactory domiciliary medical service available for the treatment of all children.

Medical treatment for all children.—At present we have medical supervision of school children and a satisfactory method of searching out defects and ailments that require treatment, but we have no really satisfactory method of securing treatment for the defects and ailments found. In many cases there is no family doctor because the parents cannot afford to run up a bill; some of the special ailments are dealt with at the School Clinic, some are sent to the already overcrowded Out-patient Departments, and many go untreated. There still remain, in addition to the disabling ailments found by medical inspection, the dangerous acute illnesses which attack school children, and for these provision has yet to be made. The operations of Maternity and Child Welfare Centres have been extended so as to deal with children up to the school age, but in this case attendance is quite voluntary, so, of course, the searching-out of defects and ailments among the pre-school children is not nearly so perfect as among the school children. Here again there is no adequate provision for treatment of the defects and ailments found or for domiciliary treatment of the pre-school child when attacked by acute disease.

Claims of the wives and children of the insured.—I am not in a position to express an opinion as to whether the Insurance Act provides a satisfactory domiciliary medical service for the insured person, but it is quite clear that the insured persons as a whole are the section of the community which, as a rule, needs the least medical

attention and at the time of the passing of the Insurance Act suffered least from the want of medical attention. The section of the community which needs most medical attention and suffers most from the want of it is made up of the wives and children of the insured persons. In any reconstructed Medical Service the mother must be put into such a position that she can call in her family doctor for herself or her children whenever they need medical attention, without being deterred by the fear of running up a bill which may take her years to pay. This proposition does not apply only to the families of working-men and clerks. There are, in fact, very few householders who can face a big doctor's bill with equanimity, and it seems obvious that the securing of a satisfactory Medical Service for all can only be met by some system of insurance or all-round levy.

CHAPTER VII

Management of the Baby

" Every mother is nurse to her own child unless either death or sickness be the let."

MORE'S " Utopia."

I ONLY propose to refer to some of the more important points with regard to the management of the child during the first year of life.

Breast-feeding.—By far the most important point is that the baby should be breast-fed.

Statistics show that the breast-fed child will flourish in spite of poverty and adverse sanitary and social circumstances. Poverty only becomes dangerous in the first year of life if the mother is so underfed that she has not sufficient breast-milk for her baby. Statistics show that all the improvements in social conditions which have taken place since 1860, and which have produced a steady decline in the death-rate of children during the second, third, fourth, and fifth years of life, had no effect on the death-rate of children during the breast-feeding year of life till the beginning of the present century, when attention began to be focused on the question of infant management. This fact is very well shown by the table on the opposite page, taken from one of Sir Arthur Newsholme's Reports to the Local Government Board.

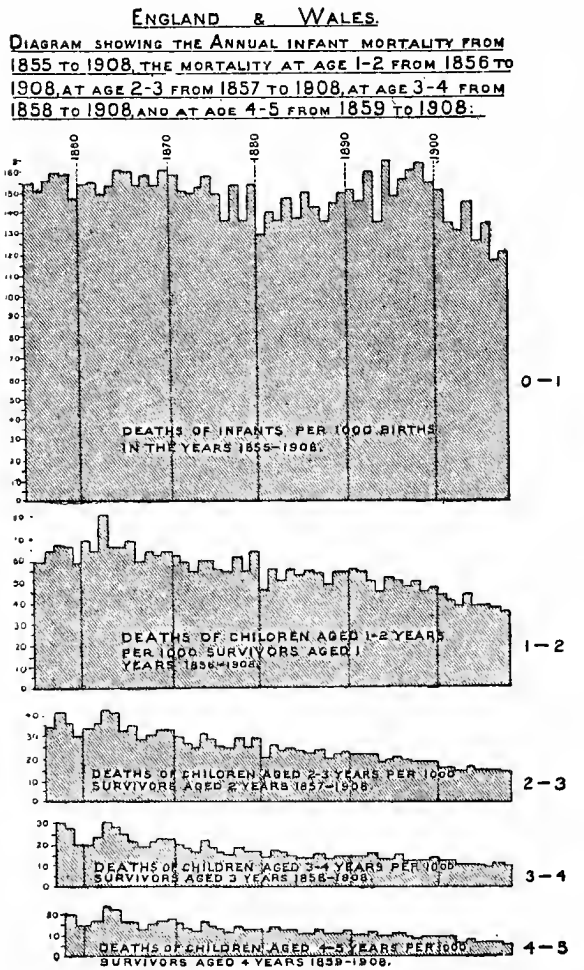

DIAGRAM FROM THE THIRTY-NINTH ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD (*see* text).

(By permission of His Majesty's Stationery Office).

Statistics also show that when the decline in infant mortality did begin it affected the later more than the earlier quarters of the year, again indicating that social improvements have had most effect in the portion of the first year least affected by breast-feeding. Breast-feeding is the chief great cause of difference in infant mortality as between one country and another, as between town and country, and as between a town where the mothers go out to work and a town where they do not. These facts have been well brought out by Sir Arthur Newsholme, Sir George Newman, and many other writers, and have already been referred to in these pages.

All medical authorities agree that the proper food for an infant is its own mother's milk, and that the baby which is deprived of its natural sustenance is thereby exposed to real risk of early death or of permanently impaired health.

The dire results of artificial feeding are well known.

Let us get rid of the idea that the disastrous results of bottle-feeding are limited to the babies of the poor. It is not so, and I would be content to prove this from my experience of the artificially-fed babies of medical friends and acquaintances. That experience shows me that apathy and ignorance about breast-feeding and the lack of perseverance in practising it extend even to doctors' wives, and that the babies of medical men, in spite of presumably greater knowledge and care expended

upon artificial feeding, suffer badly as a result of it.

Risks of bottle-feeding.—The risks run by the bottle-fed baby may be summarised as follows :

A liability to all kinds of digestive disturbance, which may result in impaired digestion for life.

A liability to rickets, with deformities, lasting for life.

An increased liability to adenoids.

A greatly increased liability to death during the first year of life from diarrhœa.

A lack of vital resistance, causing it to succumb more easily to the various diseases which it may contract.

Interference with the proper development of both the temporary and permanent teeth, with effects lasting for life.

Liability to scurvy.

Liability to contract tuberculosis by the ingestion of tuberculous milk.

The foregoing list of well-recognised dangers is, no doubt, incomplete, but it is sufficiently formidable.

What are we to say of the mother who deliberately refuses to feed her baby and condemns it to run these risks ? Is she not guilty of an offence under the Children Act for neglecting her child in a manner likely to be injurious to its health ? And if the baby dies from some one of the ailments to

which she has rendered it liable by her refusal, is she not guilty of something akin to manslaughter?

It may be that the artificially-fed infant will get through its childhood somehow and live to be a rickety epileptic, or that "the mother who wouldn't" may live to see Cæsarean section done on her daughter, on account of a rickety pelvis, when the latter bears her first child. At a recent Congress on Infant Mortality which I attended, one of the delegates mentioned that she had had this serious operation performed on herself owing to being a bottle-fed baby! I suppose children under such circumstances will not feel much bound by the fifth commandment.

If the mother does not know the risks to which she is exposing her child, is this ignorance the fault of the medical profession? If so, the sooner the remedy is found the better. There must be no uncertainty about the attitude of the profession in this matter. It must be clearly laid down that it is a crime for any woman, be she princess or peasant, who is able to feed her own baby, to refuse to do so. It will then come to be recognised as a disgrace to the community if a woman is prevented from feeding her baby by having to go out to work.

Are women unable to nurse their children?—The most important point with which we have to deal is the alleged inability of women to feed their offspring. This inability is discussed in Playfair's "Midwifery" (edition 1881), and one could imagine it possible of the Early Victorian mother.

The inability is said to be increasing, however, and to be due to the effects of " high civilisation."

It is hard to believe that the woman of to-day, brought up with much more regard for physical development, is less able to nurse her babies than was her Early Victorian predecessor. Again, one wonders what is meant by civilisation in this connection. Cannot a woman use her brain without getting atrophy of the mamma ?

Everyone recognises the difficulty of distinguishing between inability and disinclination.

First of all, we have to consider the dictates of fashion. The " woman who couldn't " has perhaps in the past been considered rather a superior sort of person, too intellectual for such an animal task.

There has been much ignorance of the importance of breast-feeding, no doubt encouraged by the half-hearted attitude of the medical profession on the subject.

The ignorance of fathers in this respect is an important factor. One hears of fathers who do not like their wives to be tied, and wish them to go away for a holiday as usual and leave the baby to the nurse and the bottle. Fathers as well as mothers need to be educated. The ordinary man probably thinks it must be a great nuisance to a woman to have to feed her baby every few hours, and does not appreciate the fact that to the normal healthy mother giving the baby the breast is an actual physical pleasure.

There has been shirking by women who did not wish to give up their usual pursuits, or to spoil

their figures. The refusal to breast-feed and the refusal to lead the regular kind of life which makes breast-feeding possible are, of course, the same thing.

Influence of the monthly nurse.—Secondly, there has been almost a conspiracy on the part of a section of monthly nurses to discourage breast-feeding, partly to please fashionable mothers, partly to gratify a sort of perverted maternal instinct and obtain complete control of the infant, partly because it is more comfortable for the nurse to heat up a bottle in her own room than to stand by the mother's bedside, perhaps on a cold night, during the thirty to forty-five minutes which is often necessary to get the infant to take its first meals. Some monthly nurses go so far as to keep the baby from the breast for the first two days, so as to avoid stimulating the secretion of the milk.

The attitude of the monthly nurse is no doubt to some extent due to ignorance—a reflex of the ignorance and apathy of the medical profession on the subject. She does not know what the baby is losing, and does not hear of its subsequent history.

Thirdly, as I have pointed out in Chapter VI., there is ignorance on the part of the medical profession as to the practical details of infant management. The management of the infant is neither medicine, surgery, nor midwifery, and has received scant attention in the medical curriculum. It thus comes about that it has been left to the monthly nurse, and if the latter reports that the milk is

insufficient, or poor in quality, the idea of breast-feeding is given up light-heartedly, and the doctor goes round saying, "How extraordinary it is that so many women can't feed their babies nowadays!"

The doctor, not being well up in the details, is not able to lay down the law to a shirking mother or a monthly nurse who is playing up to her. The advent of women into the profession might have been expected to create an improvement, but an unmarried woman doctor is not much better than a man in these matters, and when a woman doctor has had children of her own it has generally been when she is not in practice, and the value of her experience is therefore lost.

Ignorance of mothers.—At present the woman who is bearing her first child is absolutely at the mercy of the monthly nurse, and anything the latter says about flatness or soreness of the nipples, or thinness of the milk, is *ex cathedra.*

In the future, when the fashion changes and the medical profession take more interest in the matter, it is to be hoped that a woman will come to her first confinement "armed and engined for the same," with all the necessary preparation, determination, and knowledge for feeding her first-born.

The encouragement of breast-feeding may seem a task beneath the notice of the eminent physician, surgeon, or obstetrician, like the advice to wash in Jordan to the haughty Syrian captain; and yet if all mothers could nurse their babies the effect on infant mortality and the vigour of the race would

be enormous, and such diseases as infantile diarrhœa and rickets would practically disappear.

The results would be much more startling than anything that has been achieved by antitoxins, or by all the advances in abdominal surgery in recent years.

The matter is therefore eminently worthy of attention.

What is wanted at the medical schools is teachers who combine the experience and knowledge of the doctor, the mother, and the monthly nurse. All maternity hospitals do not sufficiently impress on their students the importance of breast-feeding. I have recently heard of a "Twilight Sleep" home where "they were not keen on breast-feeding."

Medical men who have given special attention to the matter find that a large proportion of the cases of alleged inability to breast-feed can be dealt with if the mother is in earnest. Thus difficulties due to depressed or sore nipples, or supposed scanty supply, can often be overcome by perseverance.

I wish in this connection to refer especially to the work of Professor Budin,* of Paris, who has shown that the supply meets the demand if the proper stimulus is applied to the breast.

This is where the difficulty of the medical man comes in. He cannot be always there to see if the nurse applies the proper stimulus by putting

* *See* "The Nursling," by Pierre Budin, translated by W. J Maloney.

the baby to the breast at the proper intervals, and he is more or less helpless when the nurse reports that there is no milk.

We must bear in mind that the theory of the atrophy of the female breast is much more startling than anything that was brought out by the Committee on Physical Deterioration, and should not be accepted without very complete proof.

The first steps are to make breast-feeding fashionable, and to secure much more attention for this and other matters in connection with infant management in the medical schools.

When this has been done we shall be in a better position for judging as to the facts with regard to this alleged physical deterioration.

Let us leave off talking of high civilisation or culture in this connection. Let us give the thing its proper title, whether it be physical deterioration, decadence, or the demands of fashion. Each sex has its influence on the other. Women are supposed to admire athletic men, and no doubt the cult of athletics is encouraged thereby. Man is surely not going to adopt as his Queen of Beauty a sham Venus, with breasts only useful for giving a pleasing outline to her clothes.

When the fashion is so changed that a woman who cannot nurse her own baby is looked upon as a poor thing or a cripple, to be pitied, we shall hear less of this "inability."

It could not have been of this sort of woman that Napoleon thought when he exclaimed, "Oh, those English mothers!"

Nor, again, Rudyard Kipling, when he penned his ode on the female of the species :

" And to serve that single issue lest the generations fail,
The female of the species must be deadlier than the male."

The fact is, we want the mother to be more deadly !

Difficulties of breast-feeding.—Of course, one recognises that there are difficulties sometimes in the management of breast-feeding, and these difficulties have been dealt with by many able writers, including Dr. Eric Pritchard, Dr. Truby King, Dr. H. Waller, Dr. H. R. Carter, Dr. F. Langmead, Dr. A. E. Naish, and Dr. Lucy Naish. I am very grateful to Dr. Lucy Naish for permission to publish as an Appendix to this book a paper of hers on this subject.

Number of feeds.—It may now be regarded as established that the baby thrives better if not fed so frequently as was at one time thought necessary. Instead of the old practice of feeding every two hours during the day and about every four hours during the night, all authorities agree that every three or four hours during the day from birth is sufficiently frequent, and that the baby should be allowed to sleep, if possible, for nine hours at night. This system is, of course, incomparably better for the mother, and lessens the strain on her. Weaning should be undertaken between the ninth and the twelfth month, and it is advisable

not to wean during August and September, when the risk of the baby contracting diarrhœa is greatest. In some cases menstruation occurs fairly regularly during lactation, but this affords no reason whatever for premature weaning.

Cow's milk.—If the unfortunate infant is denied its birthright and relegated to the cow, we are plunged into a sea of controversy as to what form of cow's milk to give.

Some, like Budin, get satisfactory results with unmodified whole milk sterilised, others prefer cow's milk modified slightly or elaborately so as to imitate human milk. It seems probable that the trouble taken to adjust exactly the proportion of casein, milk sugar, and fat is not necessary, as human milk shows fairly wide variations in this respect. An extensive use of dried milk in Sheffield, even without any special trouble being taken to give fruit juice with it daily, seems to justify the statement that the theoretical objection to dried milk on account of the supposed reduction of vitamines is not borne out in practice. The process of desiccation certainly makes the casein more digestible and avoids the necessity for the extreme dilution of cow's milk so often adopted. Desiccation also, if it does not entirely kill all the tubercle bacilli there may be in the milk, seems to attenuate them.

Most authorities agree as to the need for exposing cow's milk to a sufficient heat to kill tubercle bacilli, but this may not be necessary if one can get fresh milk from cows guaranteed free from

tuberculosis by the tuberculin test when applied by a veterinary surgeon who knows all the facts. This is seldom possible, and it is extremely difficult to get reasonably clean and fresh milk in many parts of our great towns.

Dried milk.—The difficulty is so great, and the arrangements for the transportation of milk are so inadequate, that one begins to wonder if it would not be better to deal with the milk supply of the country as a whole and only permit "wet" milk to be supplied when it is produced near enough to the customer to be delivered twice a day in a fresh condition, and to have the whole of the milk in the outlying parts of the country collected by motor vans and taken to specially erected factories to be dried or condensed. I believe the evidence in the possession of the Government is to the effect that the cost of drying the milk and the ordinary cost of distribution by milk-cart are approximately equal. It seems to me better to have a reliable dried milk, prepared near the source of production, than the dirty, stale, wet milk brought from a distance by rail, which is often all that can be obtained in the central areas of our large cities. I have always been in favour of town cowsheds, because that is the only way in which townspeople can get fresh milk. The cooler is often a snare and a delusion, because the water is not cold enough and there is no ice, and further because the milk, losing a few degrees of temperature, acquires an additional supply of dirt.

The old superstition of feeding the baby from

the milk of one cow without ascertaining if the one cow was the victim of tuberculosis of the udder is, I fancy, dead, and those who risk giving raw milk to infants and children prefer to give the mixed milk of a herd on the principle of diluting the infection and lessening the dose of living tubercle bacilli.

Food after weaning.—To return to the baby. A point upon which much stress is laid nowadays is that when the baby is weaned it should be taught to chew and given food that will exercise its jaws and teeth. Both dentists and doctors are now agreed that weaned babies and little children in the past have been given far too much "pappy" food. It is not the purpose of this book to attempt to deal with the details of infant management, and for these I must refer the reader to the many reliable guides on the subject which have been recently issued.*

Like a grown-up person, a baby to be healthy requires not only suitable food, but fresh air, rest, exercise, warmth and cleanliness, and I propose to touch on a few points with regard to these matters.

Fresh air.—A baby can get fresh air by being put outside the house in its pram from the time it is a few days old, in almost all weathers. The fact that it need not be wheeled about, and is,

* E.g. "Feeding and Care of Baby," by Dr. F. Truby King; "The Infant: Nutrition and Management," by Dr. Eric Pritchard; and the pamphlet "To Wives and Mothers," published by the National League for Physical Education and Improvement.

in fact, better in a stationary than in a moving pram (however good its springs), is a great saving of time and labour for the mother. By beginning early the baby readily gets accustomed to sleeping by itself outside. I have heard serious discussions as to whether a baby was not more liable to catch cold in a stationary pram, the disputants appearing to forget that the sleeping baby goes through no "cabman" exercises to keep itself warm. Of course, a hot bottle in the pram is often necessary. The open-air treatment of consumption has killed the old idea about the deadliness of night air. Did the idea originate when malaria was prevalent in this country and was supposed to be caused by a miasma? If there are no scavengers about, night air is probably more free from dust and purer than day air. At any rate, the baby can have fresh air at night by the window being left open.

Sleep.—As regards sleep, one of our difficulties is to persuade some mothers that a baby should sleep in a cot or cradle by itself night and day from birth. The danger of overlying may be small if the mother is temperate, but a baby undoubtedly gets worse air if it is in bed with a grown-up person and liable to be buried under the clothes.

Posture.—A common mistake is to take babies out strapped up in go-carts or mail-carts long before their backs are strong enough. They should never be made to sit up, but only allowed to do so when they insist upon it.

Exercise.—A baby gets its exercise chiefly by

lying on its back and kicking. Unlike a grown-up person and a bottle-fed baby, the breast-fed baby gets a good deal of exercise when it is having its meals by twisting itself about and working its limbs and fingers and toes. Another form of exercise which a baby thoroughly enjoys from a few weeks old is kicking in a big bath.

There would not be much rickets if all babies were breast-fed, had plenty of fresh air and exercise, and had proper food after being weaned at the right time.

Clothing.—A baby needs warm, loose clothes which will not restrict its movements. One still sees the tight binder used, as if Nature has done her work so badly that the body needs to be held together, and it is not realised that the binder is only needed to keep the navel dressing on.

Money is often wasted by parents who cannot spare it on long clothes, the process of shortening being regarded as a kind of semi-religious ceremony.

The arms and legs of a baby are often too much exposed, and one sees them taken straight from a warm cot and dangerously exposed at the open door. It is very important not to expose a baby's skin to sudden changes of temperature.

Cleanliness.—Cleanliness is the best protection against diarrhœa—cleanliness as regards the baby's body, napkins, and clothes, cleanliness in the preparation of its food. The dummy teat not only deforms the mouth and nose and leads to adenoids, it is also a fruitful source of dirt infections. The dummy teat dies hard, and it will need all the

efforts of Anti-Dummy Leagues to kill it. Until quite recently it was the invariable practice of some monthly nurses in quite "good practices" to teach their charges the use of the dummy by smearing it with treacle or other delectable.

Old wives' fables.—The management of the infant having been until recent years in the hands of untrained women, it is not surprising that a large number of superstitions and customs have arisen in connection with childbirth and infancy. Some examples of these superstitions may be worth recording.

Birthmarks are often supposed to take the shape of something which the mother desired when she was pregnant, or to be the result of some incident of the mother's pregnancy. This latter idea has been brought up to date. Cases of ophthalmia neonatorum are attributed to the strain on the mother's eyes caused by attendance at picture palaces!

If the baby cries apparently without reason, it is thought to be due to the fact that the mother, when pregnant, had some desire which she could not gratify. The baby is therefore tested with all sorts of articles of food or drink which the mother remembers she desired and did not obtain during her pregnancy.

It used to be believed that mother's milk and cow's milk did not agree, and that the baby could not be fed on both.

It was supposed to be unlucky to weigh a baby before it was twelve months old.

Wiping out the baby's mouth with its own wet napkin was supposed to be a cure for thrush.

It is considered dangerous to cut a baby's nails during the first year of life. They should be bitten! If you cut the baby's finger-nails it will be a thief, and when the time comes to cut them the toe-nails should also be cut, so that it may be able to run away.

Children born with teeth will be either drowned or hanged.

Other superstitions are that the mother must get out of bed on the ninth day, even if she has to go back to bed and stay there for several days afterwards; that if, after the child is born, the mother goes to sleep before passing water, she will die in her sleep; and that if a woman is one of twins she cannot have children of her own.

So much for old wives' tales!

The practice of squeezing the breasts of the newly born infant used to be very prevalent. At least two midwives have assured me that they were taught to do this as a matter of routine by the Sister at the Lying-in Hospital where they were trained. This is another example of the small attention given in the past to the needs of the infant by the obstetrical staffs of such hospitals.

Another custom which has been responsible for much harm in the past is the giving of a dose of castor oil to the newly born infant, from the mistaken idea that the meconium (as the greeny-black substance in the baby's bowels at birth is called) needs to be forcibly cleared out by an aperient.

The whole question of constipation in infancy has been much simplified by the introduction of paraffin oil as an internal lubricant for the bowels.

Ophthalmia neonatorum.—This disease still does not receive the prompt special treatment which it requires. The cases occurring in the practice of midwives come promptly under the treatment of the ophthalmic surgeon, but it is in the confinements attended by medical practitioners where the chief failures occur. This is an example of defective "team work." A practitioner who is not accustomed to handle such cases may undertake the treatment, the home nursing facilities may be inadequate, and as a result the case frequently only comes to the ophthalmic surgeon when irreparable damage to the eye has been done. Ophthalmic surgeons agree that with prompt skilled treatment applied at once no eyes should be lost and few damaged from this cause.

Dr. Sydney Stephenson, in a lecture delivered under the auspices of the National Association for the Prevention of Infant Mortality, points out that if simple precautions, such as are recommended by the Central Midwives Board, were adopted at birth the disease would be prevented in ninety-nine cases out of a hundred, and he estimates that the maintenance of persons blinded by ophthalmia neonatorum in these islands costs the community £350,000 per annum.

Mistakes of the past.—Owing to the lack of knowledge on the subject of infant management, advice which is now regarded as bad has in the

past been distributed officially by Medical Officers of Health in leaflets. For instance, we used to recommend the baby being fed every two hours during the day and every four hours at night from birth, and to exhibit posters showing the size of the baby's stomach at birth in support of this frequent feeding. It was also customary to recommend the "wiping out" of the baby's mouth. This is now regarded as a pernicious practice and one of the causes of thrush, the very ailment it was intended to prevent. A third common error in advice leaflets was to recommend much too "mushy" a dietary after weaning, and to disregard the need for giving the jaws and teeth something to do.

Protection from infectious disease.—A great deal more might be done to protect babies from the ordinary infectious diseases. Mothers frequently display the most blameworthy negligence in carrying their babies into infected households. They seem to adopt a fatalistic attitude of mind in the matter. Whooping-cough is most fatal in the first year of life, measles in the second, and it cannot be urged too strongly that the longer an attack of infectious disease is postponed the better is the child's chance of recovery.

Town life.—Great advances have been made in the last fifteen years in investigating the exact method in which the evils incidental to town life operate injuriously on infants. Apart from antenatal influences, the chief causes of death are still diarrhœal diseases, pneumonia, and bronchitis, and

we must all of us be convinced that if we could secure for each baby the " simple life " which it needs, infant mortality would soon be reduced to half its present figure. If it gets the first great essential—its mother's milk, the other needs, namely, fresh air, rest, warmth, exercise, and cleanliness, ought to be easily obtained.

CHAPTER VIII

Management of the Ex-Baby

THE end of the first year of life marks an epoch in several respects. The fact that the baby is beginning to speak and is therefore no longer an infant in the strict sense of the word is not the most important development from the health point of view.

It has just passed the only period of life during which it can be supplied with absolutely clean food, its mother's milk, and will now have to eat its peck of dirt with the rest of us. Whether it will get more than its peck depends upon the care and intelligence of those whose duty it is to prepare the food. It also needs food which it will have to chew.

Its exercise will no longer be taken by kicking on its back or squirming and twisting at its mother's breast, and it will soon be able to walk into infection instead of being carried into it.

We have seen how the breast-fed infant flourishes, whether in the peasant home of Connaught, the "black house" of the Hebrides, or the slums of our large cities, but when we come to consider the fortunes of the child from 1 to 5 years of age we find that he has no amulet to enable him to resist adverse sanitary and social conditions.

The ex-baby, like the infant, still needs proper food, fresh air, and exercise, rest, warmth, cleanliness, and protection from infection. Opinions will vary greatly as to which of these necessities is most often lacking and by being absent leads to disaster.

Prolonged lactation.—On the whole I should be inclined to think that in a large industrial town improper feeding is the item responsible for the most trouble. Sometimes lactation is prolonged into the second year under the mistaken idea that its continuance prevents conception. This is an unnecessary drain on the mother, and certainly tends to weaken the child and to produce a liability to rickets.

Irregular feeding.—This is very common. At the end of the first year the infant should be fed four times in the twenty-four hours. Milk is often regarded as a drink, but is, of course, a food, and should not be given except at one of the four feeding times. In a month or two the baby will only need three meals in the day, like a grown-up, and should not be given anything to eat between those meals.

Improper food.—The food is often unsuitably chosen and badly prepared. For an improvement in this respect we must look to the efforts of Schools for Mothers, and more especially to the thorough training in domestic economy which is to be included in the educational curriculum of future mothers.

Care of the teeth.—The teeth are a matter of the greatest importance. On the one hand there

must be a sufficiency of food that requires chewing and masticating, in order to secure the proper development of the jaw-bones and -muscles, and the proper blood-supply and nutrition of the teeth; and on the other hand a look out must be kept to see that the child is not prevented from chewing or masticating by the presence of tender or decayed teeth. The Government grant is now available for Dental Clinics in connection with Maternity and Child Welfare Centres for both mother and child. The child must not only have food that it requires to chew, but it must be taught to chew.

In order to prevent decay of the teeth an effort should be made to see that at the end of the meal the spaces between the child's teeth are not filled up with particles of starchy food, such as bread, biscuits, or milk puddings. A piece of apple and a drink of water help to cleanse the teeth, and the use of the tooth-brush after breakfast and after tea ought to be taught at an early age. The tooth-brush should be well washed after use and put where it can dry. It is not advisable to use too hard a brush, or to rub very vigorously, for fear of making the gums bleed or wearing away the enamel.

Fresh air.—Many doctors are of opinion that the requirement which the ex-baby most frequently lacks is fresh air. This is where a small garden plot attached to each house would come in—a safe place where the toddlers can play. In infancy the baby can have its fresh air in the stationary pram, and the practice of putting it out to sleep should be

kept up as long as it is safe in the pram. After this it can be put out in a cradle to sleep, or in a bed close to the open window. It is difficult to see how a mother of, say, four children under six can see that they all get out enough, but fortunately the " mothering " instinct is present in both boys and girls, and, if there is a safe place for them to play, the three-year-old girl will act as mother to the eighteen-months-old baby, and the five-year-old boy will act as father to both.

Fresh air at night is an easy matter if there are sufficient bedclothes. The bedroom window can then be open.

Rest and sleep.—Other doctors are of opinion that the thing from which the ex-baby most generally suffers is lack of rest and sleep. Children under five years of age should sleep the clock round, and in addition they should have a sleep in the daytime during the second if not during the third year of life. It is wonderful what food, fresh air, and midday rest do for the older children at the Open-Air Recovery Schools.

The child will not get the full benefit of fresh air and rest if it is a mouth-breather. Every effort must therefore be made to keep a fairway through the nose from birth. Mucus and dirt are apt to accumulate and block the nostrils, and must be gently removed by the mother with pointed pieces of cotton-wool moistened in water. To keep the nose clean is one of the most effective ways of preventing adenoids and promoting a healthy condition of the back of the throat. The

child should be taught to blow its nose from the first, although it will not be able to do this very effectively for a year or two. The only way to prevent a child becoming a mouth-breather is to keep its nose clean.

The success or failure of institutions established for looking after babies and ex-babies, such as Day Nurseries, Residential Nurseries, and Nursery Schools, depends upon whether they are able to provide food, fresh air, exercise, and rest; and there is no doubt that they all ought to give special attention to the toilet of the nose and the care of the teeth. The standard of institutions which take over responsibility for the care of other people's children must be the standard of the most careful and intelligent mother, and not simply care a grade better than the children might receive in an indifferent home.

One of the hopes is that by the extension of the work of Child Welfare Centres to include children up to five years, fewer children will present themselves at school in a disabled condition.

Some of the disabling ailments of school entrants are rickets, discharging ears, deafness, enlarged tonsils and adenoids, bad teeth, eye complaints such as blepharitis and squint, skin complaints such as impetigo, ringworm, and scabies, anæmia and malnutrition.

Rickets.—This affection most frequently shows itself between the sixth and the eighteenth months of life. Several causes are at work in producing it. Improper food comes first, and this is especially

helped by lack of fresh air, sunshine and exercise. We can say with certainty that if all babies were breast-fed, weaned at about the ninth month, given proper food after weaning, and ample fresh air, sunlight, and exercise, rickets would disappear.

If rickets shows itself, the great thing is to consult a doctor before bony deformities have had time to develop. The warning signs are sweating about the head, especially at night, lateness in walking or in cutting teeth, flabby limbs, pot belly, fretfulness, troubled sleep, and enlarged joints.

I can imagine no inquiry that would be more profitable to child welfare than a well-co-ordinated investigation into the causation of rickets and scurvy throughout these islands. Modern research tends to show that certain accessory food factors have to do with the causation of rickets and scurvy, and that bad teeth are a prominent symptom of both these conditions. Medical inspection of school children would give a valuable indication of the prevalence of rickets in the various parts of the country, if some uniformity of standard as to what constitutes a rickety deformity could be agreed upon. The inquiry would, of course, deal with such matters as the cause of the freedom from rickets enjoyed by the Jews and the absence of rickets in the West of Ireland and among the crofters of Lewis. Scurvy is much less common than rickets, but for each well-marked case of either disease there are hundreds of minor manifestations which probably account for a large proportion of the deplorable dental conditions found

among the population at all ages. It is therefore no exaggeration to say that rickets and scurvy are "key" diseases to a dietary which will enable children to develop into healthy men and women.

Discharging ears and adenoids.—These conditions are often associated. A child with deafness or a discharging ear should be taken to a doctor at once. There is an old superstition that it is dangerous to stop the discharge, and that the child will "grow out of it." Nothing could be more disastrous than this idea. In many cases the child becomes permanently deaf, and neglected ear discharge is a frequent cause of death from brain disease. There are few of the common ailments of childhood that more urgently call for prompt and skilled treatment than this.

As regards prevention, the measures which are useful for preventing adenoids will remove the commonest cause of discharging ears, and if signs of adenoids are present they should be treated promptly before the ear has become affected.

Bad teeth.—The causes which lead to adenoids and bad teeth are largely similar. In this connection I must return for a moment to the subject of breast-feeding. Dentists maintain that this is of the utmost importance for the development of good teeth, not only because the right food is provided thereby, but because the muscular action of the baby in munching and pulling at the nipple is much better for the development of the jaws than that involved in sucking at a bottle, however well the teat of the bottle is adapted to its purpose.

They also maintain—and doctors agree—that the constant sucking at a dummy teat tends to deform the upper jaw and leads to there being less room for the teeth and less room for nose-breathing.

After weaning the food must be such as needs mastication in order that the jaws may so develop as to give room for the teeth and a free passage for air through the nostrils.

In addition to these common requirements, if adenoids are to be avoided care must be taken to remove mucous obstructions and preserve the fairway through the nose and to encourage nose breathing. A frequent discharge from the nose and an inability to say "jam" (the child with adenoids pronounces it "jab," owing to the blockage of the nose) are among the signs that a child has adenoids which require treatment, often before earache and discharge from the ear develop.

Blepharitis.—Inflammation of the eyelids is a very common complaint among young children. The condition often dates from an attack of measles or scarlet fever, and may begin as conjunctivitis. It is commonly associated with dirty conditions in the home, and frequently with anæmia and malnutrition. An investigation made by Dr. Percival Hay, of Sheffield, among the elementary school children in 1913, showed that the disease had frequently begun during the pre-school age, and had persisted for many years. It is very important that prompt treatment should be secured, as the difficulty in effecting a cure is greatly increased if the disease has existed for a long time.

Of course, any case of **squint** should receive the attention of the ophthalmic surgeon as soon as it is noticed, and not be left till the child begins its schooling.

Skin affections.—Impetigo is a common skin disease which is highly contagious, and begins as spots and blisters. It may result in the child's whole face being covered with scabs, and calls for prompt treatment.

Scabies, or itch, and ringworm are two other common skin diseases which may arise in the pre-school age, and persist for a long time if treatment is not persevered with.

The difficulty in all these cases of affections of ear, eye, nose, and skin is to get the treatment continued till a cure is effected. If the child is taken to the hospital there is no one to follow up the case at the home if the attendance of the patient ceases or is irregular. If the child has reached school age, this is where the School Clinic comes in: the school nurse visits the home to see that the treatment is continued. When cases such as these are discovered through the Maternity and Child Welfare Centre, the most convenient way of dealing with them is to have an arrangement by which the Centre pays the School Clinic to treat them and follow them up till a cure is effected.

Infectious diseases.—When we turn to the death-roll of the ex-baby we find that the chief change as compared with that of the infant is the disappearance of the developmental and wasting diseases (i.e. premature birth, congenital defects,

atrophy, debility and marasmus), which account for one-third of the deaths of infants, and the relative increase in importance of the specific infectious diseases, such as measles, diphtheria, scarlet fever, and tuberculosis, as causes of death. Bronchitis and pneumonia still bulk large in the death returns. Whooping-cough is most fatal in the first year of life, and this is not surprising when one thinks of the difficulty a small baby has in coping with paroxysms of coughing. Diarrhœa exacts a big toll in the second year of life, but its evil effects greatly lessen during the next three years.

Measles is most fatal in the second year of life, and continues to cause nearly one-fifth of the total deaths during the next three years.

Pneumonia and bronchitis cause about one-fifth of the total deaths throughout the first five years of life.

Some valuable lessons may be learnt from these death-rates. It is obviously important that the mother should not carry her baby into the infection of whooping-cough, and yet this is quite often done. The longer an attack of whooping-cough or measles can be postponed, the less likely is it to prove fatal.

Tuberculosis is very important both as a disabling disease and as a cause of death to children. During 1911–14 tuberculosis in England and Wales caused 2.9 per cent. of the deaths under 1 year of age, 8.6 per cent. of those in the second year of life, and 12.6 per cent. of the deaths occurring at the age-period 2–5. Babies are born free from infection,

but the percentage of babies infected rises rapidly during each month of the first year of life and during each of the subsequent years of ex-baby-hood.

General tuberculosis, tubercular meningitis, and abdominal tuberculosis are the most fatal forms of this disease, while tuberculosis of the hip, knee, and spine are the commonest causes of disablement.

Bad home conditions lessen the powers of resistance, but will not cause the disease without infection by the tubercle bacillus. The infection by the tubercle bacillus comes from one of two sources, either from a sufferer from tuberculosis, generally living in the home with the child, or from drinking the milk of a cow affected with tuberculosis of the udder. This condition is quite common among cows, and any herd of a hundred cows will on an average produce one case of tuberculosis of the udder every year.

A large proportion of tuberculosis of the abdomen and glands in children and a considerable proportion of the tuberculous meningitis and tuberculosis of the bones and joints is caused by the bovine tubercle bacillus as the result of drinking the milk of infected cows. There has never been any well conceived attempt made in this country to diminish the amount of cattle tuberculosis, probably owing to the fact that the matter has been in the hands of two Government Departments. It has been the business of the Local Government Board to attack the cow and the duty of the Board of Agriculture to defend it.

However, there is no doubt that if all milk were boiled or sterilised before being given to children, this source of infection would be cut off, and there would then only remain the unpleasant idea of drinking milk from a cow with a tuberculous abscess of the udder, fortunately camouflaged, as a rule, by being mixed with the milk of a number of healthy cows.

There can be little doubt that the human source of tuberculous infection is incomparably the more important. It is one of the objects of Tuberculosis Dispensaries to teach the infectious human consumptive, by occupying a separate bedroom, by the cult of the open window, and by the collection and destruction of the infectious sputum, to live in such a way that he may not endanger the health of the other members of his family. This is a difficult problem in any case, and has been rendered much more difficult by the War. There is the scarcity of hospital accommodation for the advanced consumptive whose home conditions are bad, and there is the scarcity of house accommodation which prohibits the consumptive who is able and willing to pay for it from having a bedroom to himself. There are a few wilfully negligent consumptives in whose cases, in the interests of the wife and children, compulsory powers for removal to and detention in hospital are needed.

Clothing.—The clothes of the ex-baby should be warm, light, and loose. Children are usually dressed with a view to the gratification of their

mother's artistic sense rather than from the point of view of their own comfort and health.

In choosing clothes one should consider first the health and comfort of the child, and æsthetic considerations should come in afterwards—a long way afterwards.

Every effort should be made to encourage the use of woollen garments in preference to flannelette. Deaths of children from burns now make up nearly 2½ per cent. of the total deaths under five years of age. The Registrar-General's figures show what an enormous increase has taken place in this cause of death since the introduction of flannelette. In his Report for 1916 he shows that, as a rule, more deaths from accidents occur among boys than girls, apparently owing to the greater spirit of adventure in boys, but that deaths from burns present exceptional features. For the first three years of life more boys die from burns than girls; during the fourth year the mortality is about equal. During the fifth year the boys' mortality is only two-thirds of the girls'. During the age-period 5–10 the boys' mortality is only one-third of the girls', and during the age-period 10–15 it is further reduced to less than one-fifth. On the other hand, deaths by drowning are always, at every age, except the first year of life, many times more frequent among boys than girls. The Registrar-General's inference is that so long as both sexes are dressed alike in petticoats they are equally liable to death from burns, but that after four years of age, when the boys have been put

into knickers, their liability to death from burns is in consequence greatly reduced.

Why not put both sexes into jerseys and knickers from the second year onwards and give them an equal chance of escaping being burnt? The ex-baby may surely have the benefit of the progress in rational dressing brought about by the War without offending anyone's idea of modesty.

Death-rate of children.—The comparative death-rates under five years from measles, whooping-cough, bronchitis, and pneumonia are a safe guide as to whether the social and sanitary conditions of a town are good or bad for children. Sir Arthur Newsholme, in the Supplement to the 45th Annual Report of the Local Government Board, gives a valuable table showing these death-rates for all the great towns, and also another interesting table for all the great towns showing the death-rates under 1, from 1 to 2, and from 2 to 5 years of age. This shows that some towns improve their position after the first year, while others are notably worse for children after infancy.

Bradford is one of the large industrial towns which have a better position as regards death-rate during the second and subsequent years than during infancy, which seems to justify the deduction that the efforts of the Bradford Corporation, already referred to, are more effective when they no longer have to struggle against the failure to breast-feed. On the other hand, Sheffield, Manchester, Liverpool, Salford, Rotherham, and Newcastle-on-Tyne are examples of towns which occupy a worse

position for the second and subsequent years than they hold for the first.

It would be difficult to say which of the various causes is most responsible for this heavy mortality at ages from one to five ; it is usually several causes acting together that constitute what we call bad home conditions.

Thus, a child with its powers of resistance already weakened by unsuitable food and want of rest is attacked by measles or pneumonia. The bedclothes are insufficient, and it cannot be kept warm and have a well-ventilated bedroom at the same time, and the mother has had no education in invalid cookery. One might multiply hypothetical cases. The prime essentials, food, fresh air, rest, warmth, and cleanliness, all dovetail into one another.

At Sheffield we notice that many of the children attending our Centre do worse in the second year than they did in the first. I have discussed this matter with the staff, and the following are some of the causes which seem to operate in producing this effect.

The two-year-old may get less attention because the mother is pregnant or because another baby has arrived. He may be fed irregularly, getting a bit of bread instead of a meal, or food in between meals, and an inadequate quantity of milk. In some cases the ex-baby suffers from lactation being prolonged into the second year. Rest is not insisted upon during the day as among the middle classes. Once the child can run about,

it is allowed to do so until it either falls asleep from fatigue or becomes so fretful and peevish that the mother takes it up and puts it to sleep. Speaking generally, the children are not so well clad during the second year. Inadequate clothing in the first year is to some extent compensated by the baby being carried in its mother's arms and getting warmth from her body. When the child begins to run about, napkins are discarded, and it is a common practice for the mother, in order to save washing, to pin up the petticoats round its waist, leaving the legs and buttocks quite bare. The toddler, of course, has more opportunities of picking up dirt. During the second year, again, the child is more likely to suffer from digestive troubles in connection with the cutting of the molars, and it is also more liable to suffer from most of the infectious diseases.

The protection of little children from infection is very difficult if the common yard or court system is in vogue. It is important, therefore, that there should be a self-contained yard or garden to each house.

The diagram on p. 89 shows what an enormous and steady reduction (about 60 per cent.) in the death-rate of the ex-baby has been accomplished since 1860. But we who know the causes of death and the conditions in our big towns must feel convinced that further improvements in social and sanitary conditions could quite easily further reduce even the present death-rates by one-half.

Education.—Lastly, one cannot deal with the physical welfare of children apart from their mental and moral welfare. The education of a child begins

directly it is born, and we must see that its education is really education, that is, bringing out the good points, rather than a system of repression by everlasting "don'ts." The better educated and less harassed mother of the future, with a home equipped with labour-saving appliances, will have more opportunity for attending to the training of her children. The doctrine of original sin and the essential "naughtiness" of children has been responsible for a great deal of harm in the upbringing of children in the past.

The paragraphs on discipline and character training in the booklet "To Wives and Mothers," published by the National League for Physical Education and Improvement, are so excellent that I copy them in full.

Discipline

The good mother makes her child obey her without question, never goes back from her word, or argues the point. Do not "wheedle" or "nag," or let the child think you are in doubt, for even the youngest baby will take advantage of a weak mother. Children are highly imitative; therefore, do not deceive them or tell a lie, or they will do the same to you. The strictest parents are the best beloved, if only they are just. Do not frighten children into obedience by foolish tales of "bogies," or by threatening to tell the doctor or fetch the policeman; and do not punish them by boxing their ears or by putting them into the dark, as the child may dread the hour of bedtime for years afterwards, and thus permanently damage the nervous system.

Infant and Young Child

Character Training

It is important to feed and clothe children in the best possible way. But it is much more important to train their characters in the best way.

Why do we especially want to train children well?

1. To build up in them strong and noble characters.
2. To make them fit to face life.

Mothers should begin to train their babies as early as possible. No baby is too young to know whether he can manage his mother, or whether his mother can manage him. Teach a baby at once that he will not get all he wants because he cries for it. A little crying will not hurt him, but to give him everything he cries for will hurt him very much. It will make his character weak, undisciplined, self-willed, uncontrolled.

The child's mind grows with his body, and as the one needs right conditions, so does the other, or it will be stunted.

How can we train and educate the mind and thus influence the character? To do this, we should interfere as little as possible with Nature's methods. A baby has great power of concentration; he will look steadily at one thing for a long time. He will make a movement over and over again until he can control it. He should be left undisturbed; he should not be spoken to only for the sake of seeing him smile. Excepting during his regular occupations—his meals, sleep, and going out—he should not be disturbed when he is absorbed. When awake in his cot he should be able to see what is going on around him. This will always be enough to occupy him. As he gets older he should be taught to occupy himself, not to want constant attention from his mother. He will be much happier

and much less trouble if he can occupy himself, but he will never learn to do it if he is taken up and amused whenever he cries. To help him to gain a habit of self-occupation is to help to educate his mind and character.

A baby's mental business is to learn all he can about the world in which he lives, and he does not like to be interrupted whilst learning. Do not speak to a child unnecessarily when he is absorbed and good.

We learn and grow by trying and succeeding. Therefore, unless it is hurtful to himself or to others, do not prevent a child from doing what he can for himself, thus teaching him self-reliance.

One morning a child of 2½ came to breakfast. There were many delightful things he wished to do. He would climb on to his high chair, unfold his feeder, and painfully tie the tapes round his neck in front, and then turn the feeder round! He would take a spoon and crack his own egg. But instead of letting him do all these things, and so gradually learn how to do them, a grown-up rushed at him, tied his feeder and broke his egg, and he broke into a howl of disappointment.

Too often, out of mistaken kindness, people thwart a child when he tries, and *enjoys* trying, to attain his end by himself.

Do not indulge children. It makes them soft and selfish.

Do not nag or be harsh to them. You may make them cowardly and deceitful.

Always be gentle, but always be firm.

Let your yes be yes, your no, no. Never shake children or box their ears or frighten them.

Moral education helps children to learn self-control;

and remember you want to make them fit to go out into life, where they will need a great deal of self-control, where they will not find everything made easy for them, where they will not be spoilt and get everything they want. Regularity in good habits when children are small is a very important part of moral education, because through good habits a child learns to make a right choice, to choose the good and refuse the evil.

Let him hear only kind words and pleasant voices. Let that to which he is accustomed be right, that to which he is unaccustomed be wrong. If he is never told to do unreasonable things he will see that obedience to the reasonable actions he is asked to do is right; and he will be more likely to refuse wrong when it comes his way.

Some day he will certainly have to choose between right and wrong. He can only choose rightly if he knows the meaning of right-doing. And whilst he is small this knowledge comes through good habits, and trust in the kindness of those he loves best. The first time he makes a good choice he shows control over his will.

Therefore teach children from the very beginning:

1. How to be obedient.
2. How to be self-controlled.
3. How to be unselfish.
4. How to be pure.
5. How to be truthful.

Teach them to be unselfish by encouraging them to do things for you and for others; by making them think of other people first, not of themselves first. Do not always slave for them, but show them how they

can help you. A mother often makes her children selfish by doing everything for them, and saving them trouble. That mother is not really a good mother. A good mother thinks chiefly of what is *best* for her children's characters, not of what is easiest and pleasantest for them.

To cultivate and practise good habits, bodily, mental, and moral, is to build up a great and good character, and the famous old saying bears this out:

> " Sow an action, you reap a habit.
> Sow a habit, you reap a character."

Therefore teach your children to do right actions over and over again, until the right actions become habits, and the habits are built into a character.

CHAPTER IX

Institutions to help the Mother

FIRST and foremost among these institutions comes the **Maternity and Child Welfare Centre.** Some of these Centres have sprung up as voluntary institutions supported by subscriptions, others have been from the beginning municipal institutions. These pioneer institutions have done splendid work in showing what is needed and in preparing the way for complete schemes under the Maternity and Child Welfare Act of 1918.

The Local Government Board's circular of August, 1918, gives the following list of additional services for which the Government grant is now available :

Hospital treatment for children up to five years of age.
Lying-in homes.
Home helps.
The provision of food for expectant and nursing mothers, and for children under five years of age,
Crèches and Day Nurseries.
Convalescent Homes.
Homes for the children of widowed and deserted mothers and for illegitimate children.

Institutions to Help the Mother

Experimental work for the health of expectant and nursing mothers, and of infants and children under five years of age.

The same circular states why the comprehensive schemes should, as a rule, be prepared by the Councils of Counties and County Boroughs:

"The Councils of counties and county boroughs are the local supervising authorities under the Midwives Act, 1902, and they are also entrusted with the initiation and execution of schemes for the treatment of tuberculosis; if the organisation of a maternity and infant welfare scheme is also undertaken by them, it will be practicable to secure the unification of home visiting for a number of different purposes."

I should like to refer to a few points with regard to the component parts of a complete scheme.

The primary object of the Centre is to provide skilled advice for mothers with regard to their own health and that of their children, and to secure early treatment in the case of ailments affecting either mother or child, and in this way carry back the medical supervision which is exercised in the schools not only to the pre-school age and infancy, but also to the ante-natal period.

As in the case of the School Medical Department, the searching out of ailments is of no use unless the ailments are treated, and the need for a reconstruction of the Medical Service by which there is secured a family doctor for each family is evident. In the meantime, arrangements can gener-

ally be made with hospitals for the treatment of mothers and children who cannot afford to pay a doctor, or with the School Clinic in the case of special ailments such as those of the skin, eye, teeth, ear, and nose.

The staff of the Centre consists of the medical staff and the women sanitary inspectors or health visitors, and may also include voluntary unpaid workers interested in the scheme, who, to quote the circular of the Local Government Board, " can be of great assistance in weighing babies, in entertaining the mothers, and in giving instruction in elementary hygiene, cookery, sewing, etc."

Health visitors and women sanitary inspectors. —There has been a good deal of discussion lately as to the qualifications and training of women sanitary inspectors or health visitors.

We must freely admit that health visitors and women sanitary inspectors have to learn their work after appointment, unless they have had the opportunity of going through a stage of pupilage or apprenticeship in an already established Centre. Are we not involved in a discussion similar to that which took place when the old practitioners regarded with scorn the newly-fledged medico who had never been apprenticed ?

There is a difference in this respect, that the modern medical student, in addition to acquiring knowledge by " looking on," reading, and attending lectures, is also trained to do practical work under supervision in the dissecting room, the laboratory, and the hospital.

Hospital nurses and midwives are also trained. On the other hand, speaking broadly, sanitary inspectors and health visitors acquire knowledge by "looking on," reading, and attending lectures, without being trained; that is to say, without doing practical work under supervision. The possessor of a University degree requires to be trained before becoming a teacher. The woman who has acquired useful knowledge and been trained as a hospital nurse and a midwife needs to be trained as a health visitor. Every hospital nurse will not make a good health visitor, but, given a suitable woman, hospital training, with a considerable portion of the time spent in children's wards, must be invaluable to her in dealing with children. Some knowledge of disease must be useful to a health visitor as well as to a Medical Officer of Health, provided we do not go to the other extreme and assume that nothing else is required. Most health visitors are single women, and the qualification of a hospital nurse is one for which the mothers of children, who are apt to look with scorn on the advice of unmarried women, have some respect. Up to the present no system of training has been devised which competes with that of the hospital nurse. The health visitor receives her training as such after appointment, but the hospital training makes a good foundation to build upon. One prefers, of course, to secure a hospital nurse who is receptive of new ideas and has not spent half her working lifetime in an institution.

Another important point is the avoidance of

overlapping and the overvisiting of the homes. In Sheffield we have adopted the practice of appointing as health visitors women who are qualified as hospital nurses and midwives, and of expecting them to obtain the sanitary inspector's qualification within a reasonable time of appointment. We do not want the same home visited by a number of different women, such as the woman sanitary inspector, the health visitor, the tuberculosis inspector, the measles inspector, and the inspector of midwives. In Sheffield the woman sanitary inspector acts as health visitor and assistant inspector of midwives, and also visits measles and tuberculosis cases. In a smaller town, I think, the woman sanitary inspector might also act as school nurse, and perhaps as school attendance officer. The Sheffield inspectors do not undertake district nursing, but work in co-operation with the Queen Victoria District Nurses. Quite apart from the avoidance of overlapping and overvisiting of the homes by different inspectors, I think it is a great mistake from the point of view of the inspectors themselves to go in for over-specialisation and to restrict their work to a very narrow groove.

If, in order to discharge these various duties, the inspector possesses the triple qualification of hospital nurse, midwife and sanitary inspector, she will, as a rule, be a woman of higher attainments than the midwives whom it is her duty to supervise, a point upon which a good deal of stress has been laid lately. The chief inspector of midwives must, of course, be a medical practitioner (whether

the Medical Officer of Health or his duly qualified assistant), and the assistant inspectors must act under his directions. When difficulties arise, the midwives must be interviewed and advised by the medical inspector of midwives.

A health visitor or woman sanitary inspector who has these varied duties can be given a compact district and become well known in it as the friend of the mothers and children, and she will also have no difficulty in working in friendly co-operation with the two or three midwives resident in her district.

While I hold a strong opinion as to the value of a hospital nurse's training, I quite appreciate the fact that, if we restrict our choice of women inspectors to hospital nurses, we shall debar many suitable women from undertaking the work, and for that reason I hope it may be possible to arrange for a satisfactory course of real training which will be something more than acquiring knowledge by "looking on," reading, and attending lectures.

When a Centre opens, most of the women who bring up their children for advice are those who are recommended to come by the women inspectors as the result of visiting the home after the notification of a birth. After a time a large number of the new mothers come, with a baby or child that is not thriving, on the recommendation of other mothers who have benefited, and a large number of new babies are brought by mothers whose earlier babies have profited by attendance at the Centre. According to Sheffield experience, the Ante-natal

Clinic will only develop gradually, as it has not been customary for expectant mothers to consult a doctor unless they have had very good reason to suspect that something was wrong. The investigation of the causes of stillbirths by the medical staff of the Centre will no doubt contribute to the increase of ante-natal work.

The work of a Centre and the agencies which arise in connection with its work must vary with the circumstances of each district. Thus, the need for the provision of meals for expectant and nursing mothers will vary according to the prosperity of the district, and the need for the provision of Crèches and Day Nurseries will depend upon the extent to which mothers are compelled to leave the home and go out to work.

Day Nurseries.—A considerable number of Day Nurseries were in existence before the War, and many new ones have been established during the War to meet the emergency caused by many mothers of little children going to work at munition factories in response to their country's call. There is just the danger that Day Nurseries may come to be regarded as a legitimate part of a scheme of sanitary reform. The method and order of an institution appeal to some minds, and one reads glowing articles on State Crèches as if they represented the *non plus ultra* of progress. There is nothing new in the idea. Plato advocated communal nurseries, but he went further than most reformers because the nursing mothers of his Republic, when admitted to the State nurseries,

were not allowed to know or suckle their own babies. I conjecture that Plato was a bachelor and failed to realise what is meant by "mothering." We cannot make an ideal of Day Nurseries. All the ideals of progress in child welfare must be centred round the mother and the home. The best Day Nursery can only be a makeshift to lessen the bad effect of mothers having to leave their little children, and in a really well organised community it should be made possible for every mother of little children to stay at home. Until that day comes we shall no doubt have Day Nurseries with us, but do not let us make the mistake of coming to regard them as things desirable in themselves. Their use almost inevitably leads to premature weaning, and is specially undesirable in the case of babies in the first year of life, when they are most helpless and most in need of mothering.

Medical men who have special experience of children's diseases have a great fear of the bad effects of the aggregation of little children in institutions, owing not only to the danger of the spread of the ordinary infectious diseases, but also to the danger of the spread of catarrhal infections causing many of the children to sink into a chronic state of poor health. In order to avoid this, when Day Nurseries are necessary they should be managed as far as possible on open-air lines, and there should be an adequate trained staff in order to ensure the children getting the full advantage of open-air conditions. There should also be paid medical supervision, and the Medical Super-

intendent should inspect the babies at least once a week. A chart should be kept for each baby or child and its weight entered up from time to time, so as to record its progress or want of progress.

The following recommendations were drawn up in 1917 jointly by the National Society of Day Nurseries and the National Association for the Prevention of Infant Mortality:

(*a*) That the Nursery be approved as suitable for the accommodation of a definite number of children, and that no more be allowed.

(*b*) That the Nursery be run, as far as possible, on open-air lines.

(*c*) That there be an adequate trained staff, including a specially trained matron.

(*d*) That weight and progress charts be kept of all children admitted to the Nursery in order to record their progress. The Inspector of the Department which gives the grant will then be able to see at a glance whether the children of the Nursery are thriving.

(*e*) That there be paid medical supervision.

(*f*) That no child be admitted to the Nursery until the home has been visited for the purpose of ascertaining the reason why the mother wishes to leave her child at the Nursery, and that such reason be recorded.

(*g*) That special attention be given to prevent the total weaning of children under nine months.

(*h*) That there be systematic attention given to the homes from which the children are brought,

so as to secure continuity of feeding and care, especially in the case of infants.

There was a further recommendation that every effort be made to ensure that the Nurseries be used as Centres for training in mothercraft.

Many of these institutions have been supported by voluntary subscriptions, and owing to inadequate funds have been unable to employ a sufficient staff. One of the effects of an insufficient staff is that the babies cannot be taken out during the day. Would any middle-class mother interested in her baby's welfare send it for the day to be kept in a room with a lot of other babies?

What some mothers have to do.—It is hardly possible to do much in the way of teaching the mothers who bring their babies to a nursery. The life of a mother who goes to work and takes her baby or children to a nursery does not leave much time for learning mothercraft, as the following diaries of mothers actually using the Sheffield Day Nursery will show:

Mrs. A., a widow with two children, aged 6 years, and 1 year and 10 months. The elder attends school and is looked after by a neighbour. The younger is taken to the Day Nursery. Mrs. A. works at a factory from 8 A.M. to 5.30 P.M.

Monday.—Gets up at 6 A.M. Lights the fire and puts on the kettle, washes and dresses the two children. Gets the breakfast ready and has it with the children. Elder child then goes to the neighbour's. At 7.15 A.M. takes the younger child to the Day Nursery (distant about one mile, uphill). Has to walk, as the tram is

no advantage. At 8 A.M. arrives at work. Has dinner there. Leaves at 5.30 P.M., goes to Day Nursery for younger child. Arrives home at 6.15 P.M., lights fire. At 6.30 P.M. the elder child comes home, and the two play while Mrs. A. makes the beds. At 7 P.M. she gives the children their supper, at 8 P.M. "baths" the younger child, washes the elder, and puts them to bed. Then washes crockery and does mending. Supper at 9.30, goes to bed at 10 P.M.

The routine is the same on all days except the evenings, which vary as follows:

Tuesday.—Similar to Monday.

Wednesday.—Similar to Monday, except that after 8 P.M. Mrs. A. cleans the shelves and steps of the cellar.

Thursday.—Similar to Monday, except that after 8 P.M. she cleans the windows, cupboard shelves, fender and fire-irons.

Friday.—Same as Monday, except that after 8 P.M. she cleans the living-room, thoroughly washes floor, cleans step, dusts furniture, and makes all clean for Saturday.

Saturday.—Day Nursery not open. Leaves both children with neighbour. Goes to work from 7.30 A.M. to 1 P.M. Arrives home at 1.30 P.M. Gets dinner for herself and the children, and washes up. In the afternoon does her shopping. In the evening "baths" both children.

Sunday.—Gets up at 7 A.M. After breakfast cleans the bedroom and attic. Gets dinner, and washes up. Finishes cleaning upstairs. Finishes in time for tea.

Inspector's note.—"This is a very clean home, and the children are clean and tidy. Mrs. A. gets her washing done by a neighbour. She does not bake, but buys her bread. She buys all clothing ready-made, as she has not time to make clothes."

Mrs. B. Her husband works away from Sheffield ; sometimes sends her money. Six children, ranging from 12 years to 1 year.

Monday.—Gets up 6.30 A.M. Gives the children breakfast, and gets the potatoes ready for boiling for dinner. Sends the school children to school. Takes two children to the Day Nursery, which is one mile distant, uphill, then goes to her work as a cabinet case coverer. She works only a few minutes' walk away from her home. She goes home at dinner-time for one hour. Gives the school children their dinner. Returns to work. A neighbour helps to give the children their tea. Mrs. B. returns from work at 6 P.M., and fetches the two children from the Day Nursery. Has a cup of tea, then brushes the Sunday clothes and puts them away. Mixes about three-quarters of a stone of flour and bakes bread. Prepares the dinner for the next day. Monday evening is a slack evening.

Tuesday.—Similar to Monday, except that in the evening she does the family washing and hangs the clothes on lines in the living-room to dry during the night.

Wednesday.—Similar to Monday, but before going out in the morning she takes down the dry clothes, folds them, and re-fills the lines with wet clothes. In the evening she folds, mangles, and irons all the clothes, and makes use of the hot fire necessary for the irons to bake 1¼ stones of flour into bread.

Thursday.—Similar to Monday, except that in the evening she cleans the bedrooms.

Friday.—Similar to Monday, except that she returns from work at 7 P.M. She cleans the flues, blackleads the range, cleans the fender and fire-irons, cleans knives and forks, scrubs boards, cleans cellar steps, makes 14 lb. of flour into bread, and bakes it.

Saturday.—Day Nursery closed. Neighbour looks after baby. Mrs. B. comes home at 1 P.M. for the day. She cooks the dinner and washes up after it. Cleans the windows, and the floor of the living-room, gives the children tea and has it herself, goes out to do her shopping (meat, groceries, etc.) for the week-end. The children have baths on the Saturday night.

Sunday.—Gives the children breakfast and sends them to Sunday school. Prepares dinner (which also does for Monday cold). Tidies up the house and has a rest, by lying on the bed for the afternoon until the children come back from Sunday school.

Note.—The house has always been clean and the children well looked after. Mrs. B. has never been laid up since her marriage except for confinements, and has never had a bottle of medicine, and the children also have had good health and have troubled the doctor very little. She is thin, but thinks that "people are not killed by hard work." The set-pot is used once a week for washing clothes, otherwise all hot water has to be heated in a saucepan or kettle over the fire.

Day Nurseries without gardens.—The following extract from the Carnegie Report on Scottish Mothers and Children, written by Sir W. Leslie Mackenzie, is of interest:

"Of the Day Nurseries visited, some are well provided with gardens; others are gardenless. A day nursery without the means of placing the children in the open air, either on balconies or in gardens, is one of the least desirable of institutions. Of those visited, several were open to this criticism. But there is a criticism even more fundamental; it has been found

that, in many places, the ideal is to keep the young children sitting, correctly clothed, and still. As a means of generating rickets, nothing could be better. If there is one thing that the very young children need more than another it is constant activity of muscle. Anything that restricts the movement of a child is physiologically bad. The very young children do, of course, need much sleep; but this is not the point criticised. The criticism is levelled against the care of the children emerging into the toddler state or actually arrived there. To be kept in a still room, sitting, or bored to death by the monotony, is the least and worst service that any child can receive. Unfortunately, few Day Nurseries without access to the open air, either by balcony or otherwise, can provide the necessary stimulus. With fair justice, it has been said of these closed nurseries that if the children could be kept from being run over they would be better in the gutter. It is necessary to put this point forcibly, because our inspection proves that the cleanliness, quietness, prettiness, and cosmetic effects generally are apt to take the first place in the minds of the attendants; the children's physiological demands for activity tend to take the second place. Wherever the conditions made it possible to keep the children in the light and under the stimulus of fresh air, the whole spirit of the nursery service was different.

"The conditions criticised flow less from a want of will than from a want of knowledge. It is not fully recognised that all children require opportunities for action. As they emerge into the walking stage, the opportunities for action become imperative. The still nursery is then an anachronism. The real need is a constantly varied field of activity."

The "toddler's playground."—Sir Leslie Mackenzie goes on to commend "toddlers' playgrounds" as a relief for the overburdened mother and a tonic for the badly housed child. He speaks very highly of the success of the experiment in Edinburgh, and quotes Dr Brownlee's opinion "that children are most depressed by unhealthy surroundings between the ages of two and three."

The playground in Edinburgh is managed by the health visitors, and these are the conditions for admission:

"*First*, there must be a baby at home needing nursing; *second*, the mother must undertake to prepare the school children properly for school and to prepare the toddler for transference to the playground; *third*, she must maintain a reasonable standard of tidiness in the home. With the school children at the school and the toddler in his superintended playground the mother is enabled to attend both to her baby and to the preparation of the mid-day meal. In time for the mid-day meal the toddler is taken home, and has the rest of the day to look forward to his next visit to the playground. The equipment of the playground is of the simplest: sufficient open space, with the usual infant properties of sand, rocking horse, etc., and an open-air shelter for the rainy days. Even in the conditions of our Edinburgh climate, the experiment has succeeded in every respect. The homes are stimulated to maintain a better standard, the mother's energies are economised, the baby receives more attention, the toddler has improved, not merely in habits, but materially in health."

For further particulars of this interesting experiment I must refer the reader to the Scottish Carnegie Report.

Factory Crèches have been established both in France and in this country with the object of allowing the mother working at the factory to continue breast-feeding her baby. These again are open to the objection that the home-maker is taken out of the home, and there may be other insuperable difficulties to their establishment.

As the result of a discussion with the welfare workers, it was deemed impossible to establish a Factory Crèche in Sheffield. The times of the shifts were the first difficulty. At some of the works there were three shifts in the day, at others two, at others one, and at others shifts varying every day. The transport of the children in the already overcrowded trams was another difficulty. The welfare workers also considered that the atmosphere and noise of the works made them unsuitable places for crèches, and, further, that much of the work was unsuitable for nursing mothers.

In Sheffield, in normal times, very few mothers of little children are forced to go out to work, and even during the War our women inspectors did not come across many cases where children of munition workers suffered owing to the neglect of the neighbour or relative in whose charge they had been left. The children in Sheffield who were neglected during the War were the children of mothers who were not at work, who had acquired drinking habits before the War, and who had

more money and leisure at their disposal than usual owing to their husbands being on active service. Unless the Day Nursery is an open-air one and run on quite first-class lines I have no hesitation in saying that it is better for the babies to be left in the charge of a relative or friend while the mother is at work.

It must be borne in mind that a Day Nursery is an expensive way of helping the mother. Many of them cost 2s. per attendance, and the mother pays perhaps sixpence. A mother who takes three children to a Day Nursery five days a week can only lead the life of drudgery described in the diaries on an earlier page because of the philanthropy (?) of the State and the community in being willing to spend 22s. 6d. per week on her and her family.

Residential Nurseries.—As regards Residential Nurseries, I should say they are more difficult to manage than any other institution. In a Day Nursery you can try to exclude the infectious child and send it home. In the Residential Nursery you cannot do this. I recently heard of a small Residential Nursery which within a few months of the opening had epidemics of whooping-cough, ophthalmia, and diarrhœa, with some deaths. I think it may fairly be said that progressive Boards of Guardians have succeeded in running successfully every kind of institution under their charge with the exception of the nurseries. It is well that the difficulties of managing a Residential Nursery should be thoroughly realised, as it is quite probable that there may be a movement to promote more

of these institutions for the care of illegitimate children now that the question of the unmarried mother and her child is being considered in earnest. Sir Arthur Newsholme's remarks on this question in the supplement to the 47th Annual Report of the Local Government Board (1917–18) are very much to the point:

"Charitable agencies which undertake the reform of unmarried mothers can only effect the greatest good by keeping the mothers and their infants together. Commonly, their activities take the form of admitting the mother to a home, the infant being boarded out separately or admitted into an infants' home, under zealous and devoted women who often have no nursing and hygienic knowledge, and under whose care an appalling loss of infant life and health occurs. It is hoped that the giving of grants by the Board for the care of illegitimate infants under regulated conditions will bring most of such institutions under inspection and result in great improvements in their administration. At present, outside London there is no adequate provision for this.

"The more usual plan has been to place the infant out with a foster mother: and if a trustworthy person is available, this is more in the infant's interest than an institution, however well regulated."

Mother-substitutes not wanted.—It seems to me that the test of most of these institutions is whether they are aids to the mothers or mother-substitutes. We do not want mother-substitutes. In the course of time, when the homes are improved and playgrounds adjacent to the home, however

small, are provided, one hopes that the development of a system of trained " home helps " who may be available for the relief of the mother in times of emergency and special stress, may render many of these institutions unnecessary. Already the local authority is empowered to supply a " home help " during the mother's lying-in period, whether the confinement takes place at the home or elsewhere, and an extension of the plan to other emergencies seems quite feasible. Of course, in very many cases the mother could pay the home help herself. It would be convenient for the local authority to keep a list of such home helps, either at the Maternity and Child Welfare Centres or at some central place in each ward or subdivision of the district.

Nursery schools.—As regards the new movement for establishing Nursery Schools, provided for in the Education Act of 1918, one feels that if they are carried out in the spirit of the memorandum issued by the Board of Education they will have great opportunities for doing good in the congested districts of our large towns. If, on the other hand, they are looked upon simply as modified or glorified Infants' Departments, the whole movement is foredoomed to failure. In order to achieve success it will be necessary to have in charge of the nursery schools women imbued with something of the enthusiasm and idealism of Miss Margaret MacMillan, and it would be well if Education Committees, before doing anything in the matter, would send deputations to study the methods of the MacMillan Nursery School at Deptford.

CONCLUSION

MUCH research work is no doubt necessary before we can solve many of the problems of infancy and early childhood, but we know enough now to transform England if we could but put our knowledge into practice.

We want healthy parents and healthy homes; we want well-educated mothers provided with a sufficient income and backed by an efficient medical service.

Above all, we want to raise the ideals of motherhood, both of its duties and of its rights. We must make motherhood one of the chief features of the new social heredity which we are to impose on the nation during the coming period of reconstruction. To do this we must enlist the help of all. This is a cause in which the members of a League of Nations can honourably compete without fear of jingoism or a reversion to barbarism. In order to produce the maximum effect we must begin with the young. All philosophers from Plato onwards recognise the importance of beginning with the young. The strength of the Jesuit movement always rested on the schools which they established. The Germans, in their almost superhuman bid for world power, began from the elementary schools upwards. The Japanese,

in modernising their country, began with the schools. Critics say that our schools fail to teach character. If that is correct, we must find the remedy.

The founder of the Boy Scout movement, which has already achieved such splendid results, says: "The whole object of our scheme is to seize the boy's character in the red-hot stage of enthusiasm and to weld it into the right shape, and to encourage and develop its individuality, so that the boy may educate himself to become a good man and a valuable citizen for our country in the immediate future." Perhaps something more about the ideals of fatherhood and motherhood could be incorporated in the ethics of Boy Scouts and Girl Guides.

Benjamin Kidd concludes his book, "The Science of Power," with the following words:

"The will to attain to an end imposed on a people by the emotion of an ideal organised and transmitted through social heredity is the highest capacity of mind. It can only be imposed in all its strength through the young. So to impose it has become the chief end of education in the future.

"Oh, you blind leaders who seek to convert the world by laboured disputations! Step out of the way, or the world must fling you aside. Give us the Young. Give us the Young, and we will create a new mind and a new earth in a single generation.

"The idealism which will win out in the stress

of the world is that through which Power must obtain the completest expression. Power in its highest expression is the science of organising the individual mind in the service of the universal. Truth is nothing else than this science of Power. This is the test by which every religion will have to stand or fall."

We look hopefully to the Churches and the great teaching profession.

There is much talk of the union of the Churches. Could they unite for a nobler purpose than that of raising the ideals of motherhood?

The teaching profession has a great part to play, and we must see to it that the best men and women are attracted into this service and that their devotion is recompensed much more adequately than is the case at present.

Every boy or girl, before leaving school, whatever the status of the school may be, should know what is meant by good citizenship, and something of the duties and responsibilities of parenthood.

If we can raise the ideals of motherhood and family life and impress them on the youth of both sexes, the citizens that are to be, we shall leave the problems of human progress and social evolution in safe hands.

APPENDIX

Breast-feeding

THE paper on Breast-Feeding, read by Dr. Lucy Naish, formerly Assistant Physician to the Municipal Infant Consultations, Sheffield, at the Second Annual Meeting of the General Council of the Association of Infant Consultations and Schools for Mothers, is so valuable that I have obtained her permission to reproduce it in these pages :

Weaning at or shortly after birth is, I need hardly say, very common among the well-to-do classes, and there are signs that the custom is spreading gradually to the less well-to-do. There is a tendency amongst medical men and others to accept this as an inevitable outcome of modern life, and to oppose it merely with a few generalisations and platitudes. The historical evidence of Dr. Forsyth and the clinical evidence of Drs. Pritchard and Carter certainly seem to point in the direction of women's lessened capacity for nursing, but I think that the subject has never been thoroughly investigated, and one reason for this seems to me to be that the " baby expert " does not usually arrive on the scene until some weeks after birth. Without making any dogmatic assertion that all this modern increase of weaning is unnecessary, I hope to be able to raise in your minds the doubt whether a considerable amount of this leakage from natural to artificial

feeding is not avoidable and due to mismanagement at birth. Some of the details may seem trivial enough but my subjective experience, for I have nursed six now eight] babies of my own, leads me to believe that neglect of such details will have a profound effect upon the after course of the feeding. I believe that few doctors appreciate the difficulties attendant on the commencement of lactation, and that a mother without the intelligent and sympathetic help which comes from such appreciation often lapses into a course of feeding which would otherwise be avoidable. Forewarned is forearmed, and if the mother understands that certain things that appear to her in her weak and aching condition to be unusual and unnatural are really common and natural, her mind will be set at rest and she will not try to remedy that which requires no remedy.

The Mother's State During the First Two Days.— At this period she feels weak and aching all over, and a prime necessity for her is sufficient rest and sleep. But this it is often very difficult for her to get. It is not always possible for a housekeeper to relinquish entirely the reins of office, and the nurse, if strange, is unable to shield her from the daily cares. It is at this period that the baby so often cries both long and loud, and has no sense of the division of night from day. It will be trite to you that the milk flow is not established for the first two or three days, but in my experience few mothers understand that the crying of the baby at this time is not a cry of hunger, but a natural process for the full expansion of the lungs. The consequence of all this is that the mother gets worked up into a feverish state of anxiety, and when an opportunity for sleep comes she is unable to take advantage of it. The probable effect of this state on the function of the mam-

mary gland may be easily imagined. A vicious circle is easily set up, in which the mother's nervous state acts prejudicially to the milk, and anxiety from the poor milk supply keeps up the nervous condition.

The Baby's Difficulty in Sucking.—It is a rather curious and unexpected phenomenon that, apart from the condition known as depressed nipples, a baby should show any aversion to taking its natural sustenance. It is, nevertheless, a fact that many babies will struggle and scream for long periods before they will suck effectively, and will often repeat this performance again and again as their meal times come round. Among the poor it is quite common to find mothers who feed from one breast only, and this upon careful inquiry is found to be due in many cases, not to an abscess having developed on one side, but merely to the predilection of the infant. My own personal experience bears out not only the infantile aversion to sucking, but that the aversion is sometimes noticeably unilateral. The usual position for the nurse to place the baby for its meal is lying parallel to and at one side of the mother. Now with this arrangement the mother has to turn sideways and support herself in an uncomfortable position, in which she gets tired within a few minutes. Even when the baby takes with readiness she feels cramped and tired before the end of the meal, but when the baby struggles and refuses she is exhausted before any proper attempt at sucking has been made. The baby should be laid across the mother's body, and a pillow under the arm that supports the child's head. The finger placed in the baby's mouth acts as a stimulus to sucking, and by rapidly withdrawing it and substituting the nipple the opposition of the child may with patience be overcome.

Cracked Nipples.—The pain caused by these minute

fissures is frequently intense, and acts as a most powerful deterrent to lactation. A short time ago a friend told me that it was only the experience of what she had gone through with her first baby, which was bottle-fed and a waster, which enabled her to endure the agony with her second child. It is not my intention to plunge deeply into treatment, but I may say that the avoidance of the hardening agents that are so often recommended, the strict limitation of the time of sucking during the first two or three days, and the application of bland ointments and fomentations are to my mind the things of most importance for the alleviation of this condition.

The After-pains brought on by the baby sucking during the first two or three days are sometimes intense and sufficient to make the mother feel quite faint. I have known mothers quite worried over this, thinking there was something wrong. An assurance that this pain is really beneficial in helping the organs to regain their normal size again is a great comfort, and removes one more hindrance to lactation.

After about sixty hours the breasts begin to be hard and very tender ; it hurts the mother to move her arms or to turn over ; she feels uncomfortable ; the temperature may rise slightly, and the pain may even keep her awake. It is at this time that the stimulus of sucking causes what is known as the " draught " to appear. This is a sharp, cutting pain radiating through both breasts. It occurs about a quarter of a minute after the breast is stimulated, and the earlier the lactation period the earlier it comes on. If now the infant brings up the draught by mouthing the nipple without firmly catching hold, the breast soon gets soft again, and this is often mistaken by the mother and the nurse for an indication of a poor supply of milk. A mother should be informed beforehand that the breast only secretes

whilst the sucking action is going on, and that if that stimulus is not present the gland will become softer.

Periodic Feeding.—Some people have scoffed at the careful arrangement of hours for feeding, saying that it is an artificial interference with the natural proclivities of the infant; but the secretion of the breast certainly tends to be periodic. During the first few months the draught comes into the breast at regular periods, and if the baby is not there to suck the milk runs away. I think there can be little doubt that it is best to let the baby have its meal at what is evidently the optimum time of secretory activity, and this is borne out by the observation that if the baby sleeps over the time when the draught comes, he is usually more disturbed and fretful after his meal. It is a common thing to hear mothers say that the milk goes when they come downstairs, and I have some reason to think that the cause of this is partially, at any rate, the deficiency of regular periodic stimulation during the lying-in period. Babies do seem to sleep most soundly during the first month, and there is often great difficulty in rousing them for their feed. A quick way is to wash the face with water that is almost cold.

Rapidity of Flow.—The milk flows from the breast very quickly during the first two or three minutes; it comes out in several strong jets at this time, while during the latter part of the sucking period the flow is very slow. This may be demonstrated in more than one way. If while the baby is sucking at one side a breast pump be applied to the opposite side, the whole process may be watched, and this rapid squirting out for the first minute or two be seen. It may also be demonstrated by means of the test feed. If say the usual period of sucking is ten minutes, in the first

three minutes the baby will receive something like two-thirds the total amount of its average meal. I have known a baby weighing less than 11 lb. to take over 3 oz. in just over three minutes. This vigorous flow may irritate the back of the child's throat and cause it to choke, so that it begins to scream and refuses to suck. The mother may imagine that the milk does not suit the child, and finding that this choking and screaming does not occur with the bottle, she may be strengthened in her erroneous conclusion. She should, of course, be told of the possibility of this occurrence, and that the symptoms are of no serious import. As the milk flows out so rapidly at first it may be heard gurgling into the stomach. I have known a mother who, hearing this, thought that something was seriously wrong, and it was once quoted to me as a cause of weaning.

The Crying of the Baby.—This is often taken as an indication of deficient supply of milk. The simplest way of investigating this is to give the child a test feed by weighing it before and after a meal on sensitive scales. Such scales are often, however, not available, but a fairly accurate estimate may be made by using the pump to the opposite breast while the baby is sucking: the amount obtained is rather less than what the baby gets. The indiarubber ball of the pump should be held squeezed tight until the mother feels the draught, and then released, when the milk will flow out and fill the reservoir without further pumping. Nurses frequently use the pump in an entirely wrong manner by applying it to a breast while the baby is not sucking, nor due to suck. It is easy to demonstrate that by this means the flow often appears to be quite inadequate when in reality it is nothing of the kind. The mother, of course, is much impressed

when she sees the flow into the pump is so small, and needs very little further persuading that her milk is of little use to the baby.

Returning to the question of crying as an indication of the quantity of the supply, I have carried out a series of test feeds on one baby during the first month of life, testing almost every meal during this period, and was unable to find any relationship between the amount taken and the amount of crying between the feeds.

Nervous Phenomena.—The process of suckling a child is associated with distinct nervous phenomena. This is probably due to the stimulation of a little-used gland at a time when the general tone is lowered owing to the pain and shock of childbirth. Insanity has, you know, a tendency to appear at such times, and the lesser grades of insanity merge gradually into what may be considered as a normal, or at any rate a very usual, condition, namely, hyper-excitability and liability to be upset by very trivial causes. A headache which comes on with greater intensity when the mother tries to go to sleep, and which effectually prevents sleep, is quite common. It is often easily controlled by some phenacetin and caffeine, and it is the duty of the nurse so to arrange the work of the sick-room and the baby's outings that the mother can have undisturbed quiet from say 2 to 4 P.M. Such rest in my opinion is most essential, and should be insisted upon by the medical attendant. Bromides at night will enable the mother to get to sleep again quickly if she is aroused to feed the baby. When lactation is firmly established bromide is no longer required, for the mother then usually feels very sleepy, and will, as the Irishman said, " wake up to find herself asleep." The phenacetin, however, often needs to be continued for a month or six weeks, as

the day headache not infrequently persists for this length of time.

The length of time that a mother should stay in bed is a matter on which there is some divergence of opinion. There is a school of obstetric physicians now who recommend their patients to rise almost immediately after parturition. They may be (and probably are) quite right that the absolutely recumbent position is not the best for the woman's internal organs, but it seems to me that they leave out of count the circumstances attendant on early rising from bed. The mother willy-nilly gets plunged into the whirl of her household duties as soon as she is actually found to be up. If then she is suffering, as is only too likely, from some nervous instability, something is bound to suffer, and it is quite likely that this will be the milk supply. I am convinced that a large number of weanings take place because the mother is not sufficiently shielded from worries during these very important few weeks immediately after birth. The more careful and apt to act with foresight the mother is, the more likely she is to be affected, and this is perhaps the reason why the poor, who are generally more haphazard and leave things more to chance, do not seem to suffer so much. By all means get rid of the totally recumbent posture and let the mother sit up in bed, but have her treated as an invalid, both as regards callers and affairs of management. After the mother does get up I think it is a good plan for her to lie down while feeding the child for the first month or two. This ensures a quarter of an hour's rest every two or three hours. You may think that I am exaggerating in describing these nervous conditions, but how many babies are weaned because the doctor says that Mrs. So-and-So is not equal to the strain, and in how many of these cases

is a moment's consideration given as to whether something else may not be sacrificed rather than the natural food of the child? I am sure that a lot of weanings take place, not because the mother is definitely unwilling to feed, but because she thinks that she can combine the feeding with a lot of social duties and pleasures; in other words, she has never counted the cost. I heard of a case the other day where a mother had determined to start that insidious "one bottle a day" in order to be able to go out to dinner and theatre, and was inquiring as to what to put into it. Fortunately, the medical man pointed out the likelihood of one leading to more, and a week or two later the mother, having thought it all out, had come to the conclusion that the sacrifice of a few pleasures was a small price to pay for not only ensuring a good basis of health for her child, but giving herself that intimate interest in the child's welfare which can only be gained through sacrifice.

Fissures of the Anus.—This is a very common condition after childbirth, and excruciatingly painful, and yet the doctor is hardly ever informed of this pain. So much may be done for its prevention and alleviation, yet because the mother looks worn out and this cause is not suspected, weaning may be ordered.

Thrush.—I cannot close without alluding to what I believe is a very common, if not the commonest, cause of unnecessary weaning among the poor. Thrush commonly causes vomiting, loose motions and loss of weight, and it is not at all surprising that such symptoms are taken as an indication that the breast milk is not agreeing with the baby. As the condition is a totally preventible one, it is the more a pity that it should be the starting point of so much trouble.

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